

كَلَامُ اللَّهِ

News in brief

Overseas fees gap widens

The gap between home and overseas students' tuition fees will be wider than ever next year as a result of new fee levels announced by the local authorities and the University Grants Committee.

Although the percentage rise is marginally greater for the universities, some courses will remain more expensive in the public sector, where the minimum fee for all advanced courses rises from £3,000 to £3,180. The UGC's recommended fee for classroom-based courses will be £2,900, compared with the present £2,700, while the most expensive medical courses will cost £7,000.

Mr Rupert Bristow, executive secretary of the United Kingdom Council for Overseas Students Affairs, said this week that the decision to raise the fees will free up those for home students from the face of the Government's stated intention to consider ways of improving arrangements for foreign students.

Racism inquiry

The college lecturers' union is to set up an inquiry into the extent of racism in police training. It will evaluate whether academic freedom has been breached by the exclusion of a civilian lecturer from the Metropolitan Police school at Hendon.

The executive of the National Association of Teachers in Further and Higher Education has called for an explanation for the summary exclusion of lecturer Mr John Fernandez from the school's multicultural course. But it has called on Oriel education authority not to carry out its threat to withdraw other civilian staff from the school.

Defensive tactic

The Greater London Council will fund a new project run by the Science Policy Research Unit, at Sussex University, to look at prospects for the conversion of defence industries to other forms of production.

Bill Niven, a research fellow at SPRU, will work part-time to organize a "regional conversion council" in conjunction with the Greater London Enterprise Board. The GLC wanted to build on SPRU's previous research in the area to study dependence on defence industry in the local economy.

Local authorities in Sheffield and the West Midlands have already expressed interest in the SPRU project. The regional conversion council in London will include representatives from the GLC and the South-eastern region of the TUC.

House for sale

The University of Manchester Institute of Science and Technology has put Highbank, its former principal's residence, on the market.

The £245,000 spent on renovating the 165,000 sq ft house last year was part of a controversy at UMIST which finally led to the resignation of the principal, Professor Robert Hazledine. The Institute is unlikely to recover the full cost but says that it would cost at least the equivalent of a lecturer's annual salary to "mothball" it for a year.

Integrating chairs

Salford University has appointed two professors to integrated chairs, in which is expected to be the first of several such appointments. Mr Bernard Heath, divisional director of advanced engineering at British Aerospace Aircraft Group, becomes professor of aeronautical engineering.

Both professors will continue in their present jobs but will have the same privileges as other professors at Salford. Their chairs are sponsored by British Aerospace and British

Government 'will leave SSRC alone'

by Paul Flather

The Government has formally pledged to make no further inquiries into the troubled Social Science Research Council.

Mr William Shelton, under-secretary of state for education, said at the weekend that the Government's response to the Rothschild inquiry showed that it accepted the SSRC was needed and should be properly funded by the Government.

Mr Shelton was speaking at the inaugural conference of the Association of Learned Societies in the Social Sciences at Imperial College, London, attended by about 100 representatives from 18 affiliated societies.

He stressed that only one of Lord Rothschild's recommendations to the Government - that the budget should be reduced for at least three years - had been rejected, and this was because of pressing priorities in other fields.

"What I hope no one will overlook are the many positive points in the Government's decision on the Rothschild report," he said. It was accepted that the SSRC was needed, that it should not be dismantled or liquidated.

It was accepted that the council should continue to administer postgraduate awards, and that its functions should not be lived off by other agencies. Underlying all this, he said, was a recognition that the SSRC should be properly funded.

One important conclusion was that

the Government did not intend to hold further inquiries into the SSRC. "A line has been drawn under what I accept has been a fairly long period of uncertainty," he said.

In a conciliatory speech, Mr Shelton went on to stress that the SSRC had only been asked to consider dropping the word "science" from its title because it led to the false expectation that "exact results and precise prescriptions" could be produced.

He also hinted at the kind of "useful" research he favoured including the implications of technical change, the aims and organization of the workplace, and health research.

He praised the SSRC's new programme on drug addiction research and stressed there must be continuing attention to "first-rate fundamental research".

Mr Shelton said he realized the seriousness of asking for a £6m cut from the SSRC's planned £73m budget over three years. "Difficult questions will be raised for the council about the proper balance of support for research," he said. The money has been diverted to help "new blood" in the natural sciences.

Both Mr Shelton and Mr Michael Posner, the SSRC chairman, welcomed the formation of the new association. They hoped it would do much to improve the cross-fertilization of ideas, break down disciplinary barriers, and help to communicate social science ideas to a wider audience.

Council faces harsh decisions over cuts

A series of harsh decisions face the Social Science Research Council to deal with it considers cutting one in five staff posts, enforcing economies at its research units, and changing its own name.

Council members will have to brave a mass lobby from 120 staff who walked out of the London headquarters 10 days ago in protest at a proposal to shed 30 out of 140 jobs.

The four unions involved have said they will only call off their action if the management agrees to set up a joint working party to review the whole £21m SSRC budget to find savings. Cuts worth 4 per cent have been demanded by the Government.

Staff will report back for work next Monday whatever the council decides, but they will continue their protest with "internal sanctions". For example, they will not touch work which has come in over the past 10 days, nor do any new work assigned to them.

Union officials have asked Mr Geoff Rooker MP to convene a meeting of MPs sponsored by the unions involved to put pressure on the Government to reverse the cuts. They have also urged the TUC-sponsored educational alliance.

Mr John Macgregor, the chief officer of the Civil and Public Services Association said the staff resolve appeared to be hardening. "We feel we have already paid for cuts in terms of staff cuts. We may even review going back to work next week."

Opposition to Ulster plan expected

by Karen Gold

Proposals that a higher education planning body in Northern Ireland should have a majority of members from Great Britain are likely to arouse opposition in the province.

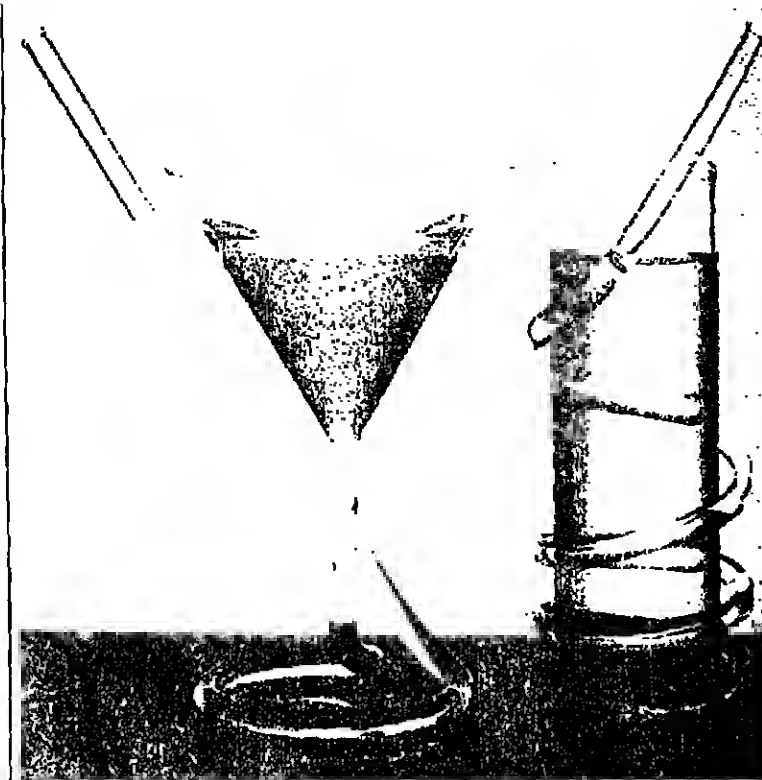
The proposals were drawn up by the Department of Education in Northern Ireland and sent to Queen's University, The New University and Ulster Polytechnic, as well as the steering group overseeing the merger of the two.

None of the unions has received a copy and the Association of University Teachers at NUJ has written to protest to the Northern Ireland education minister, Mr Nicholas Scott.

Members of the AUT and polytechnic staff who belong to the National Association of Teachers in Further and Higher Education are concerned that the body, called a "working party" in the DENI proposals, would have two members from Northern Ireland (plus DENI assessors), but up to six from the mainland.

These would include a chairman from the University Grants Committee, two UGC committee members, two British polytechnic members plus links with the National Advisory Body, possibly as an advisory officer.

The two Ulster members would be "nonacademic", and their role



Any time, anywhere any place

Televisions and cocktail glasses, washing machines and garden lights are among the products which students from the Central School of Art and Design in London have gone on to invent for the companies they joined.

Many of their designs, now household names, are contained in a new publication *Central to Design - Central to Industry* which illustrates the work of 78 industrial design graduates over the past 32 years.

Young gain from Eurocash

Britain is to receive over £29m in the allocation of the 1982 European Social Fund approved this week. A large share of it will go towards youth training.

The Manpower Services Commission is to get about £17m, to devote to work under the Youth Opportunities Programme. Some 45,000 youngsters will benefit.

In total, the UK will have been allocated 29 per cent of all the funds available for the year. Of the total spending of 1,534 European Community Units, UK schemes received 445m ECU or the equivalent of £257m.

Mr Ivor Richards, the member of the European Commission responsible for social policy, said the cash had helped to stimulate training in all the member countries, but particularly in Britain.

Other grants being given to the Manpower Services Commission out of the total £29m, are more than £1m towards new style training places, vocational training and vocational preparation for first job seekers under 18. And over £7m is to go towards a continuous training programme for unemployed people in priority regions.

Among the beneficiaries outside the MSC are Leeds City Council, West Cumbria Training Association and Dyfed Council.

Training body is criticized

The Chemical Industries Association has set up a new training department, following the demise of the Chemical and Allied Products Training Board.

The new body has already been criticized by trade unions, which claim the CIA is not the right organization to run a national training scheme.

The new unit in the CIA's industrial relations division will be run by Mr Bill McNichol, a former senior training manager with ICI Chemicals. It will offer advice to companies, employees, trade unions and educational institutions, and try to co-ordinate training across the industry.

Mr Kenneth Hack, the association's director of industrial relations, the new unit should be a catalyst for the formation of new training opportunities. The staff of three would give special attention to the needs of small companies.

The largest union in the industry, the General and Municipal Workers' Union, which opposed the dissolution of the earlier training board, is critical of the CIA's proposed replacement.

Officials point out that only 15 per cent of chemical companies belong to the association, and claim it has ignored union protests at plans to organize training regionally.

Job prospects bad for new graduates

by Paul Flather

Employment prospects for graduates will remain bleak for the coming year, with competition from an increasing pool of unemployed graduates from previous years adding further pressure, careers advisers say.

The job market has also changed radically, with employers more reluctant to estimate their vacancies. More firms now recruit at very short notice and advertise at any time during the year.

About 60,500 graduates from polytechnics and universities will enter the job market this summer, joining perhaps 10,000 graduates still unemployed from previous years. The number unemployed at Christmas, six months after graduating in 1982, is estimated at 10,000, the same as in 1981.

But prospects are likely to be better this year, with about nine in eight expected to be without jobs next Christmas. In part this is because graduates are taking on "less traditional" jobs, such as higher clerical work, or in leisure services, fast food management, even telephone sales.

The forecasts were made at a press conference in London this week by three main careers advisory bodies, the Association of Graduate Careers Advisory Services, the Central Services Unit for University and Polytechnic Careers Services, and the Standing Conference of Employers of Graduates.

They say the outlook described last year as "worse than at any time since the Second World War" remains bleak. Mr Brian Pitt, director of CSU, said he would be very surprised if prospects were as good as in 1981.

There are clear signs that last year's prediction of one in five without jobs was never pessimistic. Surrey University, for example, has just released figures showing the number of its graduates still unemployed at Christmas fell from 12.2 per cent in 1981 to 11.6 per cent last year.

In general graduates continue to enjoy many advantages over non-graduates in finding jobs, the three bodies say. But personal factors and general skills can count for much, as do numeracy, literacy, and an ability to communicate effectively.

Careers advisers also warned against basic spelling and grammatical mistakes which occurred in too many applications. "Grades of British English are badly marked by distance education," said one careers adviser.

The electronics and computer industries were the most buoyant areas for jobs. Retailing remained stable, and "new" employers, generally smaller firms, were emerging but were not compensating for cuts by the "traditional" larger recruiters, they said. The civil service remained depressed, and the armed forces and police had fewer vacancies than before.

One reaction from graduates was to try and concentrate on getting a good degree before applying for jobs. "Having nine rejections is no good preparation for finals. There are students who want the reassurance of a good degree behind them," Mr Pitt said.

A new headache for graduates, likely to become a permanent feature, is the reluctance of employers to state firmly their job vacancies for the year.

Grand old man greets disciples

continued from front page

graving disenchanted with its economic and political and religious traditions. He has been embraced as a figurehead by intellectuals in a move towards a liberal, social-democratic ideal which has been seen as a workable challenge to Marxism.

He was one of the founders, along with Ralf Dahrendorf and Friedrich von Hayek, of the Institute of Methodology and the Philosophy of Science in Turin, established last year along Popperian lines. The Turin convention was the first to be organized by the institute and attracted many international speakers including the neo-utilitarian Professor John Harsanyi of Berkeley, California and the Italian minister of finance, Francesco Forte.

Popper reaffirmed in his speech the well-known views on political freedom which he expounded in his books *The Open Society and its Enemies* and *The Poverty of Historicism*. In these works he used his theories of scientific discovery to attack totalitarianism and put forward his idea of the liberal state which allows free competition and piecemeal social engineering.

For him, political freedom is a prerequisite for the search for truth. In his speech he concluded: "A great deal of truth is buried under the ashes of those who wanted to find truth but had no opportunity to discuss their problems."

He lashed back at some of his "best former pupils", notably Professor John Watkins of the London School of Economics, who, he said, had misinterpreted his theory of the three worlds; the physical world, the mental world and the objective world of natural science and language.

The search for truth rests on a free decision which means that it is always open to refutation. But that does not mean it is arbitrary, he said. Like a jury, which weighs up the pros and cons before passing judgment, truth is arrived at through a choice of the facts presented. The freedom of that decision is symbolized by the vote.

Replacement for genetics watchdog

The Genetic Manipulation Advisory Group will be replaced later this year with a new committee under the Health and Safety Executive, if a consultant document being finalized by the Department of Education and Science is approved by ministers.

Members of the existing group, which vets gene-splicing experiments, approved the move in principle at a meeting in December. But some have doubts as to whether the HSE has the expertise to oversee genetic engineering work properly. The existing secretariat at the Medical Research Council now has six years' experience in evaluating the complex protocols scientists in universities and industry submit to GMAC, and this will be lost to the new committee.

In addition, the group, which will be called the Advisory Committee on Genetic Manipulation, will have no members delegated to represent the public interest, as GMAC has. Mrs Jocelyn Chamberlain of the Royal Marsden Hospital, said there had been concern that the move to the HSE would rule out expanding the GMAC's remit to consider social and ethical issues of genetic manipulation. But she and other groups looking at test-tube baby research suggested this kind of question would be entered for elsewhere.

The document proposing the change will be issued in about two months and will end speculation about GMAC's future. Members of the parliamentary group sponsored by the Association of Scientific, Technical and Managerial Staffs, which has two representatives on GMAC, have sought assurances from the DES that the group would continue.

Scientists find GMAC's procedures irksome, and hope the move will signal a shift to a "watchdog" over potential hazards rather than constant detailed scrutiny. Industrial representatives are unhappy with the risks of disclosure from the present group and believe the HSE can better guarantee confidentiality. And the trade unions believe the HSE is better equipped to deal with large scale projects in industry.

Open Tech to go into the management field

by Karen Gold

The Open Tech will announce its first distance learning projects in technician and supervisory education next week but will manage its initial remit into management education before the end of the year.

One project to be agreed at the first meeting of the Open Tech steering group next week would be based at a large management centre. Initially it would be the agency's main contribution to supervisor training. Most of the other projects would concentrate on technicians.

Later in the year, according to Dr George Tolley, director of the Open Tech Unit, they will consider ways it can help improve British management skills not only in areas mentioned in the agency's blueprint such as small businesses or new technology.

Other possibilities include conventional qualifications taught by distance methods - such as the MBA (Master of Business Administration) - and production of materials for senior managers, for example on marketing.

Although management education did not appear in the Open Tech blueprint, it indicated that not only technicians and supervisors were in

view. "The future potential of the Open Tech Programme stretches beyond its initial target groups and we do not wish to imply that future developments should be restricted to them," reported the Open Tech Task Group which drew up the blueprint under Dr Tolley.

Technician and supervisory projects would not suffer nor be displaced by the interest in management, he said. Nor would it threaten business schools or the Open University, which had just started a business education course.

The Open Tech planned to fill gaps in existing provision, and possibly to combine expertise from institutions in a management "think tank" with academic and industrial members. Dr Tolley said. This could ponder the problems of British industry and create material for distance learning courses simultaneously.

Creating such a group would reflect the Open Tech's policy to increase the number of commissioned projects in areas needing them in future, rather than reacting to proposals as was done for the first and second group of projects. The latter are now also close to agreement.



Mr Rob Crozier, executive secretary of the New Zealand Association of University Teachers, is the first signatory in Scotland of a British university and college petition against education cuts. The petition calls on the Government to expand investment in post-school education and will be presented to the Prime Minister in March.

Salary review proposed

Local authority employers are to draw up firm proposals for a complete revision of the further education salary structure.

Officials aim to complete the task by September and will be working on ways of severing the link between levels of work and salary. They are also keen to reduce costs so further education can compete with the Manpower Services Commission's job centres and private training schemes.

The employers met union leaders this week to discuss general observations made by both sides on the salary structure. A commitment to produce firm proposals emerged after union criticism of the insubstantial nature of the employers' outline case.

SED cuts plan faces opposition

Education college principals in Scotland will oppose proposals from the Scottish Education Department to cut the numbers of community education students.

The SED sent out a consultative letter saying a total reduction from 370 to 320 is likely to be needed, with last season's intake of 190 being cut in September to 120. It realizes there has been a "steady demand" for community education graduates and therefore has allowed a substantially increased intake in recent years. But it says an appropriate

level for future years should be below the present peak and adds that community courses should not be exempt from cuts affecting other sectors of higher and further education.

The Joint Committee of Colleges of Education in Scotland, made up of the principals and representatives of the boards of governors, meets on Monday and is expected to urge against any reductions on the grounds that there is a considerable need for community education graduates, and that they are successfully finding jobs.

What young people really need is a core covering areas such as language, numbers, problem-solving and relationships which will equip them to cope with a range of work.

This is important at present when high unemployment and technological change mean many young people face a working life in which they have to make several changes of employment," says the report.

Characteristics which employers say they seek from young people include versatility, initiative, a willingness to solve problems, a sense of pride in a job and a readiness to ask questions and listen carefully to instructions.

So all lecturers including specialists should be prepared to give time and attention to these areas.

HMI examines the training of teachers

by Patricia Santinelli

Her Majesty's Inspectors are to conduct a two-and-a-half-year inquiry into teacher training institutions across the binary divide.

So far the inspectorate has told 20 public sector institutions, one the recently-reopened Bishop Grosseteste College about the investigation. A further 10 will be added to the list from Wales and Scotland, at the request of colleges there.

This is the first inquiry into initial teacher training as a whole ever undertaken by the inspectorate and it will gather data showing the breadth of the system. Its main emphasis will be on the curriculum rather than first-effectiveness.

It has tried to get a spread of proper geographical regions, types of training and sectors in its selection of institutions which represent about half the colleges left after the recent closures.

The HMI says there is nothing sinister behind its inquiry, but there is suspicion that this is part of the Secretary of State for Education's attempt to tighten up the Qualified Teacher Status award.

Mr Leonard Marsh, principal of Bishop Grosseteste College, said he was delighted with the prospective inquiry because he had been suggesting something similar for the last three years.

The inspectorate has already visited three university departments of education and has three more invitations.

The HMI is well aware that some departments might see it as an attempt to interfere in areas outside its remit.

There are no immediate plans to declare staff redundant in colleges where Mr Marsh has put an end to teacher training.

This emerged at a meeting of the 14 affected colleges, organized by the National Association of Teachers in Further and Higher Education.

It is unlikely any details of the job losses, will emerge before Easter as many colleges are waiting to see what the National Advisory Body will suggest.

Many of the institutions are still campaigning to keep their teacher training - like De La Salle College and North-East London and Thames polytechnics. Others are holding talks with both the Department of Education and Science and the HMI, about retaining in-service training.

The Government's advisory body on teacher training has recommended that exemption from professional courses for maths and science graduates should be withdrawn at the end of this year.

The Advisory Committee for the Supply and Education of Teachers says that the exemption introduced in 1973 is no longer necessary as there is likely to be an adequate supply.

About 420 graduates, 133 in maths, entered teacher training via the exemption in 1981/82.

'More basic skills needed', FE Unit

Two many people think of skills as the ability to undertake a single, limitless task, such as typing or word-processing, says a report published by the Further Education Unit this week.

What young people really need is a core covering areas such as language, numbers, problem-solving and relationships which will equip them to cope with a range of work.

This is important at present when high unemployment and technological change mean many young people face a working life in which they have to make several changes of employment," says the report.

Characteristics which employers say they seek from young people include versatility, initiative, a willingness to solve problems, a sense of pride in a job and a readiness to ask questions and listen carefully to instructions.

So all lecturers including specialists should be prepared to give time and attention to these areas.

times, the
circumstance 8 n.
present time 121 n.
time-saving

theology 973 n.
higher education
education 534 n.

supplement
increment 36 n.
augment 36 vb.
adjunct 40 n.
make complete
54 vb.

Do words fail you when the common room copy goes missing?

It need never happen again. Just fill in the coupon below applying for a year's subscription to The Times Higher Education Supplement and you will receive a copy of the very latest Roget's Thesaurus absolutely free of charge. This handsome hardback volume specially bound for the Times Higher Education Supplement contains 1300 pages with thousands of clear and concise definitions of words and phrases in current usage. The recommended retail price is £7.95.

Please send the coupon together with your cheque for £22.50 to the address below.

This offer applies to new subscribers in the U.K. only.

Please send me my free THES Roget's Thesaurus and a year's subscription to the Times Higher Education Supplement. I enclose my cheque for £22.50. (Cheques made payable to Times Newspapers Limited)

NAME

ADDRESS

SIGNATURE

DATE

Please send this coupon with your cheque to Nigel Denison, The Times Higher Education Supplement, Priory House, St John's Lane, London EC1M 4BX.

Polys accused of racism

by Felicity Jones

Several polytechnics have been accused of racial discrimination over their treatment of a sixth former from Kent who was threatened with classification as an overseas student unless he completed additional fee assessment forms.

The pupil who is at school in Folkestone, Kent, but preferred not to reveal his identity, wrote asking for prospectuses and application forms for courses in electrical engineering. Along with the replies from Brighton, Coventry and Central London polytechnics he received fee assessment forms for completion by students of overseas origin.

Nowhere in his letter did he suggest that he was from abroad. He has lived in Britain for 13 years and

the only reason why he should have been sent the extra forms, was that he has a foreign-sounding name.

The school's deputy headmaster said no other pupil received a similar form. He said the pupil was "very distressed" to be singled out since the forms asked for detailed personal information, in particular the PC1, and the conditions on his and his parents' passports.

He was also threatened with being charged automatically at the overseas rate if he did not complete them.

A National Union of Students representative said the polytechnic should have waited for the initial application to be returned before sending the overseas fee form.

The chairman of the Commission

on Racial Equality, Mr Peter Newsam, said the applicant should have been given the form. He said he would be investigating whether this was an isolated case or the result of national policy.

The polytechnic registrars said that there had been an administrative mistake if the pupil had been sent this form on first inquiry.

The assistant registrar at Brighton Polytechnic, Mr Edward Cory, Wright said there was no question of discrimination but polytechnics faced problems over fee assessment. "We feel that we have been left high and dry, particularly since Lord Scarman's judgment over the definition of overseas status, due to lack of guidance from the Department of Education".

Scarman statement, page 8

Labour to investigate infighting for NUS

by David Jobbins

Top officials in the Labour party are to investigate how two of its organizations ran candidates against each other for a key National Union of Students policy committee.

The Labour Party Young Socialists put up two candidates of their own in opposition to two nominees from the National Organization of Labour Students for election to the NUS further education national committee.

Although the LPYS candidates were beaten the issue was raised with the party's youth committee last week and the outcome is an inquiry by the committee's chairman, Mr Denis Howell, MP for Birmingham Small Heath, and the party's national agent, Mr David Hughes.

The decision to hold an investigation into what a Labour spokeswoman said was a "lack of coordination" is to be ratified by the national executive next week. It will report to the youth committee early in February, probably recommending more foolproof guidelines for demarcation lines between the two organizations.

But the fundamental clash is over the acceptability to the current Labour leadership of the NOLS compared with the Militant-dominated LPYS.

The LPYS has lost a large slice of its budget to the NOLS, which increased its budget by £2,600 to more than £10,000. The NOLS also expects that the youth committee will



Neil Stewart: second term?

react more favourably to requests for money from the joint campaigns funds. £900 has already been granted towards preparing student activists for the general election.

The Tendency was soundly defeated at the weekend when they sought to run NOLS candidates for all seats on the NUS executive. Instead the pluralist line of the NOLS leadership won the day, although it is to run four candidates for part-time seats on the executive.

The NUS president, Mr Neil Stewart, is to seek a second term, as is education vice president Mr Tommy Sheppard. Mr Phil Woolas, already a part-time executive member, is to seek to replace retiring treasurer Mr Alan Watson.

Oral history archive set up

A new archive of oral history recordings is being set up in London by historians dedicated to the general study of "people's history".

The London History Workshop Centre has been given a £10,000 grant from the Nuffield Foundation to build a tape library of oral history drawn from more than 40 different sources and study groups.

The centre will shortly open as a resource centre for use by historians and school parties, and will publish a series of pamphlets. It also plans to repeat a successful summer school on London oral history held last year.

The centre is run by the History Workshop Group which began at a conference at Ruskin College, Oxford in 1966 to extend the frontiers of historical inquiry using particularly oral material, industrial archaeology, and more recently photography and

urban lore.

A new Television History Workshop group has been established, and its first series of programmes *Making Cars* - a factory history of Morris Motors based at Cowley, Oxford - has just started on Channel 4. The next series, in the summer, will be *Women Speaking*.

History Workshop also launched a collection of essays last week as an international tribute to Professor Eric Hobsbawm, emeritus professor of social and economic history at The London History Workshop Centre, which will be at 42 Queen Square, London WC1.

Culture, Ideology, and Politics, edited by Raphael Samuel and Gareth Stedman Jones, essays for Eric Hobsbawm, published by Routledge and Kegan Paul, price £6.95.

Administrators angry about lost job chances

The Association of University Teachers has asked London University for details of recent appointments to jobs in administration within its colleges as the first step in a campaign against recruitment from outside the university sphere.

The union is worried about what it claims is a trend towards filling senior administration posts from areas such as the armed forces and government rather than from the ranks of existing college administrators at a time when spending cuts mean there are fewer opportunities. The matter has been raised

through the university's joint general liaison committee. The union says it will also be taking it up through other appropriate committees on which it is represented. Regional official Mr William Hennessy said that the problem may well exist in other universities but recent cases at London were causing particular concern.

One example the union cites is of a college secretary with many years of experience being made redundant from one college while an ex-army officer was being taken on to fill a similar post at another college. A recent issue of the Conference

of University Administrators' newsletter carried a complaint from an administrator at the School of Hygiene and Tropical Medicine about the "continuing undervaluation" of the profession.

Professor Randolph Quirk, vice chancellor of the University of London said that the criticism was merely highlighting a couple of appointments that were being made all the time in a vast university.

The university had from its own resources appointed a redeployment officer to help with transfers from job to job and school to school.

Brief changes for literacy unit

by Karen Gold

Government-sponsored adult literacy and basic skills teaching must no longer be geared to job-hunting, following a change in the remit of the Adult Literacy and Basic Skills Unit.

The change was mentioned by junior education minister Mr William Shelton last year, but has only recently been agreed following protracted negotiations between the unit and the Department of Education and Science.

It adds the goals of improving an individual's prospects for "education and training" as alternatives to the "employment" of the original remit, as legitimate reasons for funding developmental projects within local education authorities "designed to improve the standards of proficiency for adults... in the areas of literacy and numeracy, and... related basic communication and coping skills".

ALBSU's director Mr Alvin Wells said that the change was not as substantial as the unit had wanted since the idea of leisure as another legitimate reason for improving skills was not included. But it did show the Government recognized that in a time of high unemployment projects could not be judged simply on whether they improved immediate job prospects.

"It is significant that at a time when education seems to be moving more towards vocational education, this shows that is not the only kind of education that is important, nor the only kind of motivation" he said.

ALBSU's future is also the subject of a series of nationwide meetings consulting local authorities, voluntary organizations and other providing bodies, as well as tutors and students, on how it should develop after 1985 - the date to which its remit was last extended.

More than half those meetings have taken place, and there is almost unanimous support for the continued existence of a central development unit, according to Mr Wells. Opinions have been divided over whether such a unit should extend its interest to coping and life skills, and whether it should continue to sponsor innovative projects solely on their national rather than local contribution.

But most of those consulted wanted a clarification of ALBSU's uncertain position as far as English as a second language was concerned and a longer term remit.

New industry links proposed

by Olga Wojtas
Scottish Correspondent

The eight Scottish universities and five colleges have joined a campaign to forge an alliance between higher education and industry.

The £100,000 scheme has been launched by the Scottish Council (Development and Industry), an independent organization whose members include companies, banks, trades unions and chambers of commerce. The initiative for the scheme has come from British Petroleum which last year was the principal sponsor of the Donaldson Report on the relationship between industry and Scottish schools.

A steering group, chaired by Dr Tom Johnston, principal of Heriot Watt University, will conduct an initial six-month investigation to see how expertise in higher education could be used to improve Scottish businesses.

The Scottish Council was considering

how to rejuvenate the Scottish economy through educational and industrial links, said Dr Johnston, and such links were in the forefront of current discussion on high technology in the United States.

As well as the universities, Robert Gordon's Institute of Technology, Napier College, Glasgow and Paisley College of Technology and Glasgow College of Textiles are backing the project. Companies involved include The British Technology Group, The Caledonian Aviation Group, IBM and ICI.

The deputy principal of Strathclyde University Professor James Harvey, and Mr Michael Wehler of the Scottish Business School will join five industrialists interviewing both academics and business people on potential links.

Mr Johnston said there were many existing links between industry and education, "but like Topsy, they just grew. They are very much ad hoc, and some have been the inspiration of government, others the institution's own initiative."

Review of tutorial relations

by Sandra Hempel

Kent University is reviewing the way it monitors students' progress, following criticism from the Archbishop of Canterbury.

Dr Robert Runcie expressed concern over the ease of a theology undergraduate, Simon Gosling, who was sent down last year for poor attendance and work record.

Mr Gosling failed his first-year examinations but after passing them at a re-sit, was then absent because of illness and personal problems when he missed many lectures and did none of the required essays.

He first took his case to the High Court where he was told approach Kent's Visitor, who is Dr Runcie. While rejecting Mr Gosling's appeal, Dr Runcie said in his report that he was concerned that no attempt was made to contact Mr Gosling to find out why his record was so poor. "We think this indicates there may be grounds for a fresh consideration of tutorial relationships and we hope some thought may be given to this by the appropriate authorities."

The university has since reinstated Mr Gosling on compassionate, not legal, grounds and he is expected to take up his studies again soon.

In a memorandum to members of the senate and council, the vice chancellor Dr David Ingram says that the university is considering ways in which academic assessment and oversight could be improved, particularly in view of the recent financial position, and that recommendations will shortly be put before senate and faculty boards.

If students were often absent it might be necessary to have a "less personal way" of checking their progress, the vice chancellor says.

This could mean that tutors would be relieved of some routine work to have more time for students who have problems, a university spokesman said.

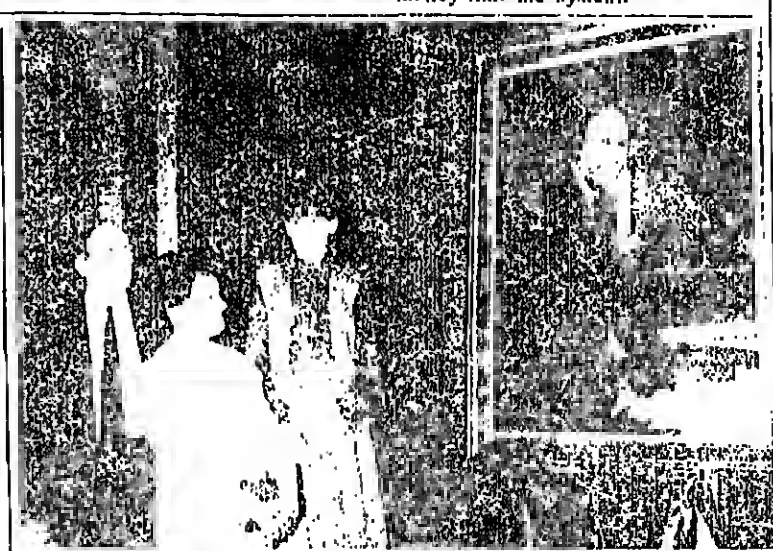
"But Mr Gosling did not keep his tutors informed or seek their help. The university believes a balance should be kept between providing tutorial support and spoonfeeding."

Public support for Preston's poly

A random poll by students at Preston has revealed considerable public support for post-school education and for the town's polytechnic.

Nearly 97 per cent of the 175 people canvassed said that further or higher education was important for school leavers and almost as many thought it important for the unemployed. It was still generally considered that people who had received some form of higher education had a better chance of getting a job than others not so privileged.

A surprisingly high number of people seemed largely ignorant about the



A portrait of Professor George M. Burnett, the former principal of Heriot-Watt University who died in 1980, has been unveiled at the university by his widow, Mrs Nan Burnett, who was accompanied by her children, Mr Alastair Burnett and Mrs Susan Rutherford.

How adult campaigners plan to step up the PACE

The Save Adult Education Campaign, a collection of adult education providers, teaching unions and students, is considering proposals to change its image and activities from that of a last-ditch defender of a beleaguered service into a pressure group campaigning for its future.

The proposals, to be discussed by about thirty member organizations next month, include a change of name to the Partnership for Adult and Continuing Education (PACE). This is intended to reflect the new forward-looking approach which the chairman, Mr Robin Gray, describes in a letter to members as "change of emphasis from a defensive, reactive organization, to a campaigning, initiating one."

They are contained in a draft manifesto for the campaign, which includes the general aims of securing more recognition and resources for adult education, improving the range, quality and accessibility of provision, halting the trend towards higher fees and a self-financing service, and the establishment of a mandatory basis.

A right to education at all stages of life should be established, together with minimum standards of provision

"We need to harness the brain power we've got and draw on what are the good parts of the experience we've had so far."

Mr Hamish Morrison, the council's chief executive, who described the venture as "potentially one of the most important initiatives in the council's 50 years history" said studies at a UK and European level tended to be too diffuse. Scotland, however, was small and self-contained enough to be vividly analysed.

Dr Johnston said it was hoped to complete interviewing by Easter. "This is action research, not an academic study for its own sake," he said. "If we produce recommendations later than mid summer, we couldn't expect much to happen in the universities before October 1984."

Dr Johnston agreed that the council could well recommend external funding for higher education projects but added: "This is not a cry de coeur in disguise, and simply an exercise to find more ways of getting money into the system."

MSC seeks sponsors for youth scheme

by Patricia Santinelli

Colleges, local education authorities and voluntary agencies are being asked to provide at least half of the places for the Government's one-year Youth Training Scheme which was officially launched this week.

Announcing a £1.5m advertising campaign to recruit sponsors and managing agents Mr David Young, chairman of the Manpower Services Commission, said they were looking for a further 300,000 places for the scheme which begins in September. He hoped half of these would come from colleges, i.e.s and voluntary agencies.

"So far we already have had the offer of 50,000 places from major employers. In addition we have 100,000 high quality Youth Opportunities Programme places which will be converted to YTS," he said.

Among employers listed by the MSC are British Rail, the Federation of Clearing Banks, GEC and the British Association of Professional Hairdressing Employers.

The commission has already made it clear what sort of regional distributions of places it expects. The highest numbers are to be in the Midlands and South East with 80,000-85,000, whilst the lowest are to be in Wales with 25,000.

Mr Young stressed that the scheme, which is to provide all 16-year-olds and unemployed 17-year-olds with vocational preparation should combine work experience and a minimum of 13 weeks' further education training was designed to be a permanent feature with the emphasis on high quality.

In fact the commission has taken the unusual step of publishing minimum standards which it expects sponsors and managing agents to adhere to, although it accepts that these will evolve as the schemes get off the ground.

Schemes are to contain at least eight design elements which include occupationally based training, five core areas including an introduction to computer literacy and information technology, as well as assessment and certification.

In addition they should provide training in six broad areas such as basic skills and additional skills, job specific and transferable skills, the world of work and personal effectiveness.

Schemes are to contain at least eight design elements which include occupationally based training, five core areas including an introduction to computer literacy and information technology, as well as assessment and certification.

In addition they should provide training in six broad areas such as basic skills and additional skills, job specific and transferable skills, the world of work and personal effectiveness.

At present, said Mr Fletcher, there were unnecessary barriers between school and further education. "Young people are faced with a bewildering variety of choices which lead many to take a wrong turning."

Current further education courses have been devised for some branches of industry and commerce, says the report, which makes it difficult for young people to move within the system. Separate courses are often designed with their common content ignored with, for example, the various

branches of engineering each devising a maths syllabus. This new curriculum, says the SED, will enable students to attend courses both part time and full time and "offers clear possibilities of credit transfer within and among institutions."

The SED seems to discount the concept of tertiary colleges, however, saying that it will not ask education authorities to make changes in organization or set up new institutions.

The report says that closer collaboration between schools and FE colleges implies staff flexibility. "Differences in the minimum qualifications necessary to hold a teaching qualification for secondary and for FE are the principal and most obvious barriers to progress in this area."

But it reports that the professional Scottish teaching body, the General Teaching Council has rejected the idea of a new 16-18 teaching qualification, and sees no reason to change the training for secondary or FE teaching qualifications.

Conservative trade unionists have given a warm welcome to the Government's technical education initiative for 14 to 18-year-olds as a "first step" towards enabling young people to match Britain's foreign competitors in development of new skills and technologies.

A resolution at the Conservative trade unionists' Bristol conference last weekend also called for closer cooperation between the Department of Education and Science and the Department of Employment to ensure the most effective use of abilities and resources.

It was moved by the organization's teachers' group.

Changes will help over-16s

The Scottish education minister, Mr Alex Fletcher, has announced plans for a new school and further education curriculum to help the over-16s.

The Scottish Education Department's document, *Screen to Eighteen in Scotland, an Action Plan*, proposes new courses based on learning units rather than single subjects and hopes by 1985 to reduce the present variety of vocational certificates to a single certificate of vocational studies based on the units completed by candidates.

At present, said Mr Fletcher, there were unnecessary barriers between school and further education. "Young people are faced with a bewildering variety of choices which lead many to take a wrong turning."

Current further education courses have been devised for some branches of industry and commerce, says the report, which makes it difficult for young people to move within the system. Separate courses are often designed with their common content ignored with, for example, the various

branches of engineering each devising a maths syllabus. This new curriculum, says the SED, will enable students to attend courses both part time and full time and "offers clear possibilities of credit transfer within and among institutions."

The SED seems to discount the concept of tertiary colleges, however, saying that it will not ask education authorities to make changes in organization or set up new institutions.

The report says that closer collaboration between schools and FE colleges implies staff flexibility. "Differences in the minimum qualifications necessary to hold a teaching qualification for secondary and for FE are the principal and most obvious barriers to progress in this area."

But it reports that the professional Scottish teaching body, the General Teaching Council has rejected the idea of a new 16-18 teaching qualification, and sees no reason to change the training for secondary or FE teaching qualifications.

TEC applicants have too little maths, say universities

Some universities are reluctant to admit applicants from Technician Education Council courses to engineering degrees because they have too little mathematical experience, university admissions tutors have told the council.

The said at a meeting in London that better communications were needed between colleges and universities to help them assess candidates.

The council believes that practical skills should also be taken into account when TEC students are evaluated for university entry. But one university tutor said afterwards: "frankly, we

actively discourage them at the moment because we're a bit worried about the maths."

However, some universities are trying to get round the problem by seeking additional maths qualifications before admission or offering supplementary teaching.

Only about 1 per cent of TEC students seek entry to university, although they now make up as much as 10 per cent of the new intake on some engineering degrees.

University representatives emphasized that the Universities Central Council on Admissions form was not

designed for details of TEC courses, and admissions officers invariably had to write to the colleges concerned for full information. However, universities which had taken larger numbers of TEC students were beginning to learn what passes to look for, and which colleges produced the most capable candidates, they said.

Some felt that courses with exams at the end of term or session gave a better guide to likely performance within the university system. Tutors also asked for more detailed literature from the council to help them to assess TEC students' grades.

'Blacks lose their sporting chance'

from Peter Davitt

WASHINGTON
Far-reaching plans to reform inter-collegiate athletics in the United States have caused a bitter rift between black and white colleges which field football and basketball teams in the student first division.

At a stormy meeting in San Diego last week the presidents of big universities persuaded the National Collegiate Athletic Association - the governing body for college sport - to adopt stringent new rules to ensure that players in big-time inter-collegiate matches are bona fide students with respectable academic credentials.

But the rules were vehemently opposed by the presidents of black colleges represented in the first division, who said the new rules would discriminate against black athletes. Several black universities are threatening to retaliate by withdrawing from the NCAA and from the American Council on Education, the body which proposed the new rules.

The most contentious of the new rules, which will come into operation in 1986, will prevent first-year students from participating in major sport competitions unless their school-leaving qualifications showed evidence of academic competence.

A first-year student would not be eligible to play unless he or she left high school with a grade point average of at least 2.0 (on a minimum 4.0) in a core curriculum of academic subjects including English, mathematics, social and natural sciences.

In addition, the student athlete will be required to have scored at least 700 (out of a maximum 1,600) on the combined verbal and mathematics portions of the Scholastic Aptitude Test (SAT) or an equivalent score on the American College Testing Service (ACT).

A second rule, which will be introduced in 1984, will insist that student athletes show signs of making satisfactory academic progress at college.



College football: will the new rules overturn the system?

enning a specified number of credit hours on a single degree programme.

Mr Joseph Johnson, president of Granblyng University in Louisiana, said the proposal discriminated against student athletes from low income groups and ethnic minorities by introducing arbitrary cut-off points based on controversial testing procedures. The SAT has often been accused of a cultural bias against blacks.

But delegates at the NCAA voted three to one in favour of decisive action to reduce the growing number of scandals where talented athletes have remained on student teams while pursuing bogus degrees or receiving covert payments in breach of amateur rules.

Mr Fred Davidson, president of the University of Georgia, said it was critically important for universities to

re-establish academic standards for students participating in big-time sport.

He continued: "This is absolutely necessary for the future of college athletics and for the tremendous role athletics can play as an incentive for academic achievement at the high school level."

"High school sports can become the carrot that drives students with athletic ability to academic achievement so that our campuses are not turned into salvage operations," he said.

Intercollegiate sport matches have become a multimillion dollar business in the United States and provide universities with lucrative incomes from gate receipts and the sale of television rights. But the pressure to compete and field star athletes has led to a succession of scandals.

In many cases, universities have recruited student players who are enormously talented athletically but have no realistic prospect of completing an academic degree. Other scandals have involved the covert payment of star athletes who are supposed to observe strict amateur rules.

The NCAA has tried to prevent such abuses by imposing numerous regulations on member universities, but they have not been completely effective. At present the NCAA has 19 colleges on probation for violating its rules and is investigating another 35.

Last year the extent of rule violations and corruption became so alarming that the American Council on Education, which represents 1,400 universities, colleges and higher education associations, warned that higher education institutions were being brought into public disrepute.

An ACE committee under Harvard president Derek Bok suggested imposing the new rules to restore academic standards and bring college sport back into the mainstream of academic life. Members of the committee warned that if the NCAA refused to adopt the reforms leading universities would adopt them unilaterally and refuse to play institutions which did not.

Black college presidents are incensed that the ACE pushed its proposals through the NCAA without consulting them. They claim the new academic standards have been set far too high and will destroy the hopes of young black sports players.

Dr Jesse Stone, president of Southern University in Louisiana, labelled the changes "patently racist" and warned that black universities were considering leaving both the NCAA and the ACE.

A. B. Williamson, the basketball coach at Howard University in Washington, predicted the rules would eliminate almost all black students from competition in their first year.

Harvard boycott goes ahead

Undaunted by hostile press comment, students at Harvard's law school have carried out a threat to boycott a course on race discrimination being offered in this term by two civil rights lawyers.

Protesting students, led by Harvard's Third World coalition, forced some 40 colleagues who chose to attend the lectures to walk through a picket line before participating in a first lecture a fortnight ago. The protesters objected to the fact that one of the teachers on the course, Mr Jack Greenberg, is white.

The student action was planned as soon as details of the new course were announced last summer. The Third World Coalition, a group representing minority students, said the course ought to have been taught by minority group lecturers on the law school staff.

Mr James Vorenberg, the law school's dean, argued in a letter to students that the boycott would damage race relations. "To boycott a course on racial discrimination, because part of it is taught by a white lawyer, works against and not for shared goals of racial and social justice," it said.

In months of intense debate before implementing the boycott, however, spokesmen for the Third World coalition denied that they objected to Mr Greenberg simply because he was white. They said the use of a white lecturer from outside Harvard exemplified the university's failure to appoint enough black lecturers.

Mr Cecil MacNab, joint chairman of the Third World Coalition, said the university had run the course as an inadequate response to student demands for a course on civil rights issues and for the recruitment of more black lecturers. Only two members of the university's 66-member law school are black.

Call for more resources

by Olga Wojtas

The final report of New Zealand's University Grants Committee review is likely to recommend more academic staff and increased resources for research and libraries.

The report of the three-man committee of Professor Bert Brumfield, vice-chancellor of Canterbury University, and two of New Zealand's most prominent businessmen, is understood to be based on seven discussion papers already produced.

Previous UGC recommendations were for a staff student ratio of 1:10 but this was eroded over a number of years because of increases of several hundred per cent in non salary items. Universities were not reimbursed for these and had to divert money intended for salaries.

The staff student ratio is now over 1:12, but the Brumfield committee's staffing paper reiterates that it should be 1:10.

"The report is understood to conclude that the universities seem to be meeting the needs of both the public and private sector at present, but stresses that more resources are urgently needed if any further progress is to be made."

It is vital to have new equipment for research, said previous UGC discussion documents, which singled out computer science as one of the most vital areas to receive more funding. They also called for an increase in the number of social work graduates.

Mr Rob Crozier, executive secretary of New Zealand's Association of University Teachers, who has been visiting British universities for the past six weeks, said the recommendations contained in the previous discussion papers showed there was "very good support" for the present university system from the Brumfield committee.

A staff-student ratio of 1:10 was AUT policy, he said, and the system was now estimated to be around 700 lecturing posts short.

But Mr Crozier was concerned that despite changes in the tertiary assistance grants scheme, students may still face financial problems in coming to university.

An extra grant allowance for living away from home will be available from the new session beginning next month, but this added to the basic grant means a weekly allowance of only New Zealand \$51 (£23). At New Zealand \$10 (£4.50) is given to only a small minority of students whose parents fill in a complex means test questionnaire.

Mr Crozier said there had been virtually no change in the student grant over the past seven years. "The system has always relied on students working in the holidays, and they need savings of about £500 just to survive," he said. "This has never been a problem in the past, but now because of general unemployment, students are having difficulty finding work, and our worry is they may not be able to earn enough to get to university."

"The government is committed to open entry on one hand, but if it's financially more difficult, there is a long term danger of turning it into an elitist system."

Mr Crozier was also concerned that despite changes in the tertiary assistance grants scheme, students may still face financial problems in coming to university.

Merger dispute is settled

A two year dispute between a number of Australian colleges of advanced education and the federal government over forced mergers has now been settled. Four out of 31 colleges, which were told to merge with other institutions in 1981 or have their federal funding cut off, resisted the government's demands for a year but have now accepted the inevitable.

The minister of education Senator Peter Baume, said he had approved payment of grants for 1983 and 1984 to Annandale, Newcastle and Milperra colleges of advanced education in New South Wales, and the Hawthorn Institute of Education in Victoria.

Annandale CAE would be amalgamated with the university of New England and Newcastle CAE with the University of Newcastle.

Detailed arrangements for Milperra and the Hawthorn Institute are still being finalized by the respective state ministers for education.

Castro puts his faith in university 'volunteers'

Cuba must have a firm determination to "improve the quality" of its university education, president Fidel Castro asserted in his address at the recent congress of the Cuban federation of university students (FEU). Yet he is clearly prepared to overlook the educational needs of his students when the need arises by calling for final year "volunteers" whenever the needs of the Cuban economy or its international commitments demand.

Such calls are quite frequent and, according to Castro, are met with 100 per cent readiness to volunteer by the department in question. He cited several examples. That first concerned engineers in the sugar industry: contact was made with the FEU, and hundreds of senior engineering students went immediately to the sugar mills and the cane fields. Similar situations in the steel industry, and "basic industry" met, said Castro, with a similar response.

Then came the problem of new weaponry for the Cuban army. When this arrived there were "insufficient" army training personnel to cope with 1,000 final-year students of electronic engineers. They were asked to join the armed forces - and all 300 volunteered.

In 1981 a call came from Nicaragua for more doctors to supplement the Cuban medical teams already working in that country. Cuba had no more doctors to spare but it did have 1,000 sixth-year medical students. The FEU was asked to select 100 volunteers to go to Nicaragua and all 1,000 students volunteered. The necessary 100 were selected from



Castro: emphasis on quality

them. A similar solution was found to the same problem in 1982.

Cuban aid to her overseas allies seems generous to judge from Castro's speech. After a group of Cuban teachers in Nicaragua were "murdered" by what he describes as "gangs, armed, encouraged and organized by imperialism", Castro had offered, he said, "100 per cent Cuba's primary teachers" to Nicaragua.

"Imperialism", Castro also claimed, had "orchestrated great scandals" about the presence of Cuban teaching and medical personnel in Latin America, alleging that they were, he said, "special troops of culture, morality and dignity", doing their work under the most "incredibly difficult conditions that can be imagined."

Rome introduces four postgraduate courses

from Uli Schmetzer

ROME
For more than a decade Italian academics have pointed out the need to introduce postgraduate courses to stimulate research.

After a series of attempts aborted by the constant fall of governments a law reform in July 1981 created a doctorate of research and gave the option to every university to organize doctorate courses.

This month Rome University, Italy's most congested campus with 150,000 students, announced that it would launch four-year postgraduate courses this year.

Rector Carlo Roberto, an able politician, heralded the decision as a significant effort to "close the gap between the Italian university system and that of other countries."

He said at the launching ceremony the courses were not only an important key to the campus reforms but would encourage young graduates to take up research that would keep them at universities later as staff.

But there was one catch already. Of the 407 postgraduate posts made available by the university 143 have already been earmarked for "senior" members of public administration or have been promised to "senior" teachers at secondary schools.

That left only 264 posts for *laureati* holders anxious to continue their academic careers. These posts will be awarded after an examination of

each applicant, who can then apply for a limited number of scholarships.

Academics are even more baffled by the incredibly wide range of courses available for the successful applicants. There are 57 doctorate courses ranging from the conservation of architectural heritage (obviously designed for public servants) to Roman and East Mediterranean law in humanities faculties and evenational biology, electrophysical science and space engineering in the science sector.

The courses are part of a long overdue government plan to boost research, sadly neglected during the 1970s, when the unwieldy mass campuses, overcrowded and side-tracked by political issues, gave little scope for research projects.

In a surprise move last year the government made available £2.2bn for scientific research (A 42.3 per cent increase over the previous year). At the same time the national research council announced that an extra 3,000 full-time researchers would be employed to bring the envisaged number of researchers to 35,000.

As expected, the bulk of funds was allotted to engineering and nuclear research as Italy desperately tried to keep pace with academic research and opportunities in other western countries. Having lost an estimated 10,000 of its brightest students to foreign universities last year.

Japanese teach in English

from A. S. Abraham

Lectures and teaching materials in the postgraduate civil engineering course at Tokyo University are to be in English instead of Japanese from April onwards. The university authorities have agreed to this change under pressure from staff who say promising overseas students have been put off enrolling by the difficulty of learning Japanese.

A university staff returning from a recent mission to academics in other Asian countries reported that although Japanese universities were held in great respect, the language barrier was regarded as insuperable even by many first-rate graduates.

A spokesman for the Japanese foreign ministry said: "It is hoped that the opportunity to study civil engineering in English will attract a far greater number of overseas students, and that it will serve to broaden the intellectual experience of Japanese students enrolled on the same courses."

Meanwhile, a number of recent graduates from EEC countries will soon be learning Japanese in Japan under the European Commission's executive training programme designed to help EEC countries.

Recognition restored

from A. S. Abraham

Apparently under pressure from the provincial government of Bihar state in eastern India and from medical students there, the Indian Medical Council has restored recognition, albeit temporarily until 1987, to the five medical colleges in the state which it had de-recognized last April.

The colleges are Bhagalpur Medical College in Bhagalpur, Patliputra Medical College in Patna, Nalanda Medical College in Patna, Magadh Medical College in Gaya, and the S.K. Medical College in Munafarpur.

Recognition had been taken away when an inspection by IMC monitors found the colleges not to have enough staff, equipment, buildings and other teaching and training facilities. The step threw the careers of hundreds of medical students into jeopardy and was a humiliation to the government of a state which, even by Indian standards, is notorious for its corrupt, cruel and caste-ridden bureaucracy.

On December 9, the IMC had sent the state government a letter saying that the five colleges had not yet complied with the minimal requirements to merit recognition. Yet, on December 24, a second letter was dispatched, "modifying" the earlier one and restoring recognition for five years during which time the colleges are expected to take the necessary measures to come up to scratch.

Normally, the IMC does not restore recognition until it has inspected the facilities made available since the withdrawal of recognition and is satisfied with them. In this case, no such inspection took place before the re-conferment of "temporary" recognition.

One of the IMC's complaints had been that 350 teaching posts had not been filled in the colleges. Since April, the Bihar government claims to have filled 179 of them, more than throughout the preceding five years. Yet, many of those appointed have not yet started work. Nor is it clear what criteria this rush of appointments has been made.

Again, the state health department estimates total expenditure on providing adequate buildings for the five colleges at Rs.16 crores, or a little under £10 m. But the amount sanctioned for them in the current year is only Rs. 2 crores.

Our North American editor reports from a recent colleges' conference in Washington

Former education secretary calls for 10-year unit on tenure

A former education secretary opened a conference in Washington last week with an outspoken attack on academic tenure and call for reforms in university lecturers' conditions of service.

Mrs Shirley Hufstедler, secretary of education in the Carter administration, called on universities to modify academic tenure despite the fact that it was the most sacred of education's sacred cows.

"Job security is unquestionably an important element in maintaining academic freedom. But perpetual job security is not essential to intellectual integrity of either the person or the institution and, in an era of shrinking resources and static faculty growth, tenure rigidity can threaten academic freedom," she said.

Mrs Hufstедler proposed that tenure should be limited to 10 years in future, with options by the university or college to renew tenure in five yearly increments thereafter. As an added incentive for specially talented staff, longer renewal periods could be prescribed for professors appointed to some chairs.

She continued: "The model itself can be modified to meet the needs of the individual institution. As you know, many structures must be moved even to experiment with this design, ranging from rules developed by accrediting agencies to regulations adopted by a particular university or college."

"But the merit of even such difficult changes may become much more apparent as institutions after institutions confronts aging faculties with little or no room to obtain or retain

younger faculty, who can both sustain the continuity of intellectual growth and development and renew the scholarship and the intellectual strength of the institution," she added.

Almost as holy as tenure was the road to tenure, Mrs Hufstедler continued. It was a road "closed by been written for audiences that do not exist". The scramble for tenure had produced teams of unpublished trivia, often larded with unhelpful jargon designed to impress rather than inform.

Mrs Hufstедler's remarks were contained in a keynote speech at the beginning of the annual meeting of the Association of American Colleges, which exists to promote the notion of liberal scholarship in its

575 member universities. In addition to calling for changes in tenure, she appealed to colleges to pay more attention to interdisciplinary work and to improving the speaking and writing skills of students.

Besides learning English, students of the humanities and the sciences should be taught a common vocabulary of concepts and frameworks of thought which could enable them to communicate across the disciplinary boundaries, Mrs Hufstедler said.

She continued: "Human beings fear what they do not understand. If scientists continue to be ostracized from the great majority of our people, that fear may well turn to anger that could jeopardize the very developments in science and technology upon which we must depend."

Other faculty members of the influential Carnegie Foundation in 1979 and has been responsible for a number of inquiries. The most recent report issued by the foundation, written mainly by Dr Boyer himself, called on government agencies to give universities more freedom to manage their own affairs.

Later this year, the foundation intends to publish the results of a vast study of American high schools with a set of recommendations for raising standards and restoring public confidence in education.

Other public figures named by the William Moss Institute last week included Paul Samuelson, the Massachusetts Institute of Technology economist. A survey of experts found that he was considered to have made the most important recent contribution to understanding economics.

As many as 40 opponents of the government led by Lt-Col Desi Bouterse died following a period of protests in which the trade unions and the university were prominent. The regime says that action was necessary to prevent a counter-revolution by the "wealthy elite."

The man with the power...

Dr Ernest Boyer, president of the Carnegie Foundation for the Advancement of Teaching and a former US commissioner of education, was named by a private research institute last week as the most influential person in American education.

The William Moss Institute, a new organization affiliated to the American University in Washington, named Dr Boyer after seeking the opinions of 50 leading educationists. A similar exercise was used to name the individuals considered to have made the best contributions to the fields of communication, health and medicine, economics, energy and the control of crime.

Dr Boyer became president of the influential Carnegie Foundation in 1979 and has been responsible for a number of inquiries. The most recent report issued by the foundation, written mainly by Dr Boyer himself, called on government agencies to give universities more freedom to manage their own affairs.

Later this year, the foundation intends to publish the results of a vast study of American high schools with a set of recommendations for raising standards and restoring public confidence in education.

Other public figures named by the William Moss Institute last week included Paul Samuelson, the Massachusetts Institute of Technology economist. A survey of experts found that he was considered to have made the most important recent contribution to understanding economics.

As many as 40 opponents of the government led by Lt-Col Desi Bouterse died following a period of protests in which the trade unions and the university were prominent. The regime says that action was necessary to prevent a counter-revolution by the "wealthy elite."

Mr Curtis said the new emphasis on liberal education was being given special help by several charitable foundations previously more interested in professional and specialized education.

The Alfred Sloan Foundation, for example, had recently awarded more than \$3m to 31 liberal arts colleges to develop courses.

Humanities 'indispensable'

The primary role of the humanities should be the cultivation of educated men and women, not social engineering or the solution of political problems, Mr William Bennett, chairman of the National Endowment for the Humanities, said last week.

Speaking to academic deans at a meeting of the Association of American Colleges, Mr Bennett said humanities lecturers would not advance the cause of their discipline by promising to contribute more to the formulation of public policy than they were able to deliver.

"Promising illumination of particular issues through the humanities is like writing a bad cheque. It will attract takers. But if we write a cheque we can't cover, we shall find the bounce damaging to our reputation," he said.

"The humanities do not magically reveal the best strategy for reducing unemployment, the proper mix of weapons for our armed forces or the right level of government assistance to needy people."

Mr Bennett said it was no coinci-

dence that some of the most popular projects supported by the National Endowment - such as exhibitions and local reading and discussion projects - had no directory connexion with contemporary political and social issues.

People would pay attention to the humanities and support them only if the humanities remained true to themselves and humanists remained more interested in great books than front page headlines. But that did not mean that the humanities should be studied merely for antiquarian interest or confined in an ivory tower.

"I embrace the view that the humanities provide us with an indispensable framework for the civilized development of policy," he said.

"But they do so less by attacking sensibility, a moral and imaginative framework, determined by qualities of mind and heart, to distinguish the ability to judge, to distinguish, to discern and, not least, to defend what deserves to be defended."

A liberal awakening

American higher education, beset as it is with financial difficulties and falling enrolments, may be on the brink of an unexpected intellectual renaissance, according to Mr Mark Curtis, president of the Association of American Colleges.

In an optimistic address at the end of the association's annual meeting, he said there had been signs in the past year or two of a promising future on American campuses for general liberal education - a form of education which had been badly neglected since the 1960s.

He continued: "Whereas 20 years ago few faculties were concerned about the overall purpose of undergraduate education and how it might prepare persons to be competent human beings as well as good historians, physicists, mathematicians or anthropologists, now on campus after campus, influential, creative groups within the faculty as well as among academic administrators are awakening to the importance of liberal education."

As evidence for an awakening in-

Peter Davitt,
North American Editor,
The Times Higher Education
Supplement,
133 H Street N.W.,
Suite 440
Washington DC 20003,
Telephone: (202) 638 6765

Physicist enters science policy's centre stage

Jon Turney talks to Sir David Phillips, new chairman of the Advisory Board for the Research Councils.



science, rather on the physics side". He hoped the SERC would be able to come to the ABRC and say some aspect of big physics or astronomy should be curtailed. But if not, "then it would be up to the ABRC to produce that advice".

One way of carrying that advice through would be to have more "independent" members on the ABRC. The heads of research councils, departmental chief scientists and the chairman of the UGC are all ex officio members of the ABRC. The last of these and six other independent members form the group which first evaluates the forward looks proposed by the research councils. Sir David wanted to see this group augmented to give better spread of disciplines to help add weight to their verdict. "One needs people who know how the research council systems work, but who are also close enough to the bench to know what's going on," he suggested.

He also wanted to increase the representation of industrial research on the board, feeling that "people within industry have research management skills of a particular kind and experience of what the interaction between civil science in the universities and government establishments, and industry ought to be."

While his own work has not brought much contact with industry, Sir David has been on the board of the state-sponsored biotechnology company, Celtech, for the last year. This he said he was "enjoying very much, and it's giving me a glimpse of the development of high technology industry on the biological side." That experience will clearly come to useful at a time when the ABRC and the Advisory Council for Applied Research and Development, are coming closer together. Last year the two groups were given a joint secretariat in the cabinet office, and one of Sir David's first jobs will be to agree the form of a new, comprehensive annual review of government research and development with the chairman of ACARD, Sir Henry Chilver of Cranfield.

He regards the varied demands of the new post as a challenge, while retaining the hope of all scientists about to shoulder a heavier administrative burden that it will not take up too much research time. A modest man, he combines an easy-going courtesy with considerable determination. He can take head in his predecessor's view that there is no one best distribution of the science budget. As Sir Alec Morrison put it, "In the end, there are two matters of judgment, there's no two plus two equals four."

But at the same time, the ABRC would need to undertake some deep subject reviews, and if necessary override the inertia built into the system. In theory, the individual research councils, who each produce their own annual forward looks for consideration by the ABRC, should be capable of this, but there were obvious obstacles. The SERC, for example, lumped all of "small science" under one board, so "you have in a sense formal lobbies within that council, and two of these are for big

appreciation of the way research costs rise simply through the development of new equipment for doing the same jobs more efficiently - which has perhaps been more important for the success of crystallography than other methods of investigation. When he began in the late 1940s, "we made components very much in the style and sealing of the first things I did, with a fellow graduate student, to assemble an X-ray generator. It was a very labour-intensive business, and the calculations we did by hand."

More elaborate projects quickly prompted him to adopt the new digital computers for data processing, and crystallographic studies of biological molecules advanced with the limits of available computing power. Even today, Oxford does not possess a fast enough computer for his unit's needs, and new work relies on a link with a Canada to work on proteins. Cray 1 computer at the Daresbury Laboratory has helped researchers at Oxford "peel another layer off the onion". As the resolution of the technique is increased, a much more dynamic picture emerges than the image embodied in the brass rod models of proteins built in the 1960s. The group now sees lysozyme's chain of amino acids as part of an object which vibrates or pulsates in many different ways, which may also affect its activity in the body.

A second lesson from a career in this field lies in the value of harking to one's own judgment. In 1955, when Phillips was asked to return from a stint in Canada to work on proteins with Bragg at the Royal Institution, he was joining a small group of scientifically ambitious men with faith in their technique in the face of widespread scepticism. The structure of DNA, a relatively simple problem crystallographically, had only just been solved, and more by trial and error model-building than calculation. Proteins were many times as complex: "The crystallographic community was then very divided on whether protein structures were soluble, and I certainly knew many in Ottawa who thought it was a mad enterprise that could never succeed."

The rewards for proving them wrong were considerable. They included a professorship in the new unit at Oxford, swiftly followed by



Scarman judgment leads to stalemate

John O'Leary on the overseas fees ruling

Lord Scarman created uncertainty

relying on the precedent of the Lords' judgment. Such a possibility was not available before because of the stipulation that rulings by the Secretary of State were immune to the provisions of the Act. Not surprisingly, in such a legal minefield and with such large amounts of money potentially at stake, no one is committing themselves on further action in advance of a pronouncement from the DES. And the DES lawyers are quite sure that this time they have the answer right.

After all, the best legal brains in the country have been arguing over the concept of ordinary residence for a number of years and successive Secretaries of State for Education have been content to let them continue, rather than take the initiative themselves. Last night, it is said, when Lord Scarman and his colleagues surprisingly overturned the judgments of lower courts and ruled that students

should be given "home" status if they had been in the country for three years, no matter what the purpose of their residence during that time.

The DES advice to local authorities, issued in a circular four years ago next week and based on a small number of tax cases, was that a three-year stay did not necessarily constitute ordinary residence if the person concerned could be shown to have been "travelling home" to another country. This view was challenged immediately by the United Kingdom Council for Overseas Student Affairs and others, who argued that the department was confusing the concepts of residence and domicile. Indeed, UKCOSA went accusing the DES of partiality and an "extremely selective citation of cases".

As the various test cases made their ponderous progress through the legal system, ministers raised pressure not only from bodies like UKCOSA and NUS but also from the local authorities to clarify the position with new

legislation. Now it seems that the Lords have made such a course inevitable, although the timing is such that at least an intake of students must slip through the net, escaping the higher scale of fees and also qualifying for mandatory awards.

Meanwhile, student unions are being inundated with inquiries from confused members bopping for a financial windfall. Advisors at NUS headquarters have dealt with more than 200 cases since the start of the new term and the number will be multiplied many times at a local level. Their only course at present is to tell students to register a claim with their local authority as long as they made an original unsuccessful application for a grant, and then wait for clarification. If they are asked for payment for health services, the advice is to refer the doctor or hospital to the relevant health authority if the student believes that he or she has been wrongly classified.

Both local authority associations, UKCOSA and NUS have all asked for new consultation before ministers decide on their next move. The Council of Local Education Authorities received a report on the implications of the judgment at its meeting yesterday, pointing out the urgency of at least an indication from the DES on the likely direction of future policy.

The fear of the campaigners is that their victory may turn out to have been Pyrrhic: if few students benefit from the judgment and a new, more restrictive criterion emerges in its place. In particular, there is concern that the fees might be delayed and even watered down as a result. By next month, a circular should have been issued by the DES, answering at least some of the questions. Or will it simply provide more work for the lawyers?

Paul Flather reports from a conference marking the hundredth anniversary of Marx's death

The old gentleman who engenders passionate debate

No thinker since Muhammad has made such an impact on human history as Karl Marx. More than a third of mankind is ruled by governments claiming some sort of allegiance to his philosophies; most other countries have a political party doing likewise.

Last week 130 historians from 21 countries gathered for a conference in Linz, in Upper Austria, in the first of many international conferences to mark the hundredth anniversary of Marx's death. It was sponsored by UNESCO, and organized by the International conference of labour historians group which is based in Austria.

They met to discuss Marxism and historical science, and there is little doubt that Marx would have been surprised to find discussion of his "method" in 1983 with capitalism still very much the dominant form in Europe. Indeed, a recurring theme of the conference - critical for all academic scrutiny of Marxism - was how sacred Marx's writings are.

By the end most had admitted that Marx could make mistakes. Even the Russians. But they also stressed the correctness of scientific socialism as laid down in *Das Kapital*.

The clearest picture of the influence of Marxist ideas emerged: most of those present would regard themselves as Marxist, and yet there were often startlingly different standpoints, most notably of course across the two European blocs. For the East Europeans with so much at stake formal scholarly debate was all but impossible at times. As one historian put it, "There is a great gulf between scholars and state officials. We have both types here."

Broadly the papers dealt with four themes: problems of Marxist historiography; the development of the Marxist tradition; the different formations of society; and theories of the state. The greatest excitement came over the claims of a Dutch researcher from the Institute of International Social History in Amsterdam, that the famous 1844 *Paris Manuscripts* had been given exaggerated coherence and status by the early publishers in 1932.

Great ideological capital could be made from such findings, and as the news spread the paper became more and more the topic to discuss at dinner. But the Soviet delegation from the Marxist-Leninist Institute in Moscow kept missing the point. They attacked the paper because it ascribed "too much importance" to the early writings. It was left to a German, Henryk Skrzypczak, to say these "lyrics of alienation" have been shown to have "rubber foundations" and that at last they could set up "a dam that can really hold up the flood" of Hegelian and humanist ideas in Marx.

At one stage the Russian, Professor Alexander Malyshev, forgave the Dutch historian, Jurgen Rojahn, as he was obviously a "hard-working young man". Perhaps, he said, Rojahn, who is 41, had started work too early, as the *Manuscripts* are shortly to be republished in the MEGA edition of Marx's works. Professor Herbert Steiner, the Austrian who organized the conference, declined to be unipite.

Undoubtedly one of the purposes of such conferences is to allow eastern bloc historians to meet informally with western bloc historians, irrespective of whatever might have to be said on the platform, recorded, and sent home for careful analysis in the form of conference papers.

The extent of what is said by East Europeans varies according to the person or the country, and for example in the case of Poland, the current state of play in the country. The Soviets, the Rumanians, and the Czechs, are certainly the most "orthodox". Yugoslav for instance attacked Engels' claim that the Slav people were "history-free" demonstrating how they had come into

their history in the twentieth century. The East Germans were constructive in debate, while a Hungarian spoke fiercely about the Stalinist pressures which had undermined historiography. But this, I discovered later, is very much the official line.

A Polish historian discussed the crises in her country since 1944, and described the crisis of 1982 as a "mental" failure of the Polish people to adjust to socialist pressures. This, it was widely felt, could be interpreted in different ways.

The opening paper was given by Professor Eric Hobsbawm, who is emeritus professor of economic and social history at Birkbeck College, London, and an Austrian who fled fascism to England just before the war began by reminding the historians of the scale of Marx's achievements.

Professor Shlomo Avineri, the Marxist scholar from the Hebrew University in Jerusalem, wasted no time in making clear that for him at any rate Marx was no prophet. In his analysis of the Asiatic mode of production Marx had been wrong, even if this was quite understandable, he said. The conference also heard Marx had been wrong on the Slavs, and on his theory of the state, which had not turned from an instrument of oppression into no more than a kind of central traffic policeman.

Dr James Young, lecturer in history at Stirling University, raised temperatures by urging colleagues to look anew at Marx's writings to re-discover ideas "which appeared to have been lost after 1917". His paper dealt with class consciousness. "I do not want to criticize Bolshevism, but see that it is not applicable to Europe," he said, regarding some ground.

There were papers and discussion on Austro-Marxism, the Paris Commune, the Plekhanov Group in Tzarist Russia, and Kautsky. Professor Sadao Ohno from Japan said he had unearthed a notebook of Marx on geology in which economic development was likened to a forest.

The only American, Dr Helmut Glaeser, professor of history at the Polytechnic Institute of New York, presented a startling paper that Marxism had "triumphed" in American universities, even if "deceptively". He said some 500 professors were now Marxist, the discipline was studied seriously, and every magazine board had at least one resident Marxist. No wonder the Russians were so keen to get hold of his paper. At the same time he claimed the power of universities had been lost to the industrialists.

The real theatre however came from Professor Malyshev. He agreed that the work of Marx and Engels had "gaps". But in the words of Lenin they were still "greats" and everything derived from them had to be accepted. Marx for the first time had looked at history as a natural science, and that was his great contribution. He soon, however, got on to Reagan and the imperialists who by trying to make profit had started two world wars. Now the Americans threaten a nuclear war, he said. Unemployment was the work of the capitalists, Reaganomics was a term of mockery everywhere, lie continued. All this earned him a rebuke for not sticking to the point.

Hobsbawm closed the conference saying certainly there would not be such passionate debates if the ideas of the "old gentleman" were not important. He may not have been so well known in 1883 but there was no doubting his influence in 1983. More than any other, he is the thinker perhaps Darwin, "he was still alive" and mentioned more often than others even in non-Marxist books. The best way to honour him was not to merely cite his texts, but to use his methods. There are said to be over 70 more such conferences this year to take up these themes.



When Marx's views were anti-Marxist

One of the commonest attacks on Marx is that his theories have not worked. Professor Shlomo Avineri took up this challenge when discussing Marx's ideas on the Third World, a field where he said Marx had been both wrong and even anti-Marxist.

Marx's "Euro-centrism" became one of the underlying themes of the conference. A Danish historian, Jens Rahbek Rasmussen, even said bluntly that if there was to be serious study of pre-capitalist history outside Europe, "We would do well to pretend Marx never wrote a word on the subject."

Avineri's view is that Marx underestimated the power of capitalism to survive, and the strength of imperialism even after losing direct territorial control. But then the Third World was not an issue in the nineteenth century as it is today, he said. An Austrian, Konstantin Kaiser, said it only became an issue when the people of Africa and the Third World began to struggle.

According to Avineri Marx's view of the "extra-European" world was strangely static, and anti-dialectical. In his papers on China and India he did not write of historical development. He used a geographic concept, the Asiatic mode of production, rather than a historical one.

But every philosopher, in Hegel's words, is a child of his time. Avineri said, "We have to say Marx could not have known what would happen in 100 years' time." Taking Marx's views on the Asiatic mode of production as correct only showed the dangers of hagiography. These views are probably explained by the fact that he himself knew little about the Third World and that he derived his ideas straight from Hegel.

Perhaps Marx should not have bothered. But as another historian pointed out he was peculiarly non-Euro-centric in that he did, against the trend, write on non-European countries. Avineri concluded there is still room for a *magnus opus* on Marx and the Third World which would do much to update Marx's theory 100 years on.

Another issue of the time is the national question, the conference heard. One must go back to cuttings from 1933 - 50 years after Marx's death - a significant date for the twentieth century. It was agreed in 1983 it was still on issue needing analysis by Marxists.

Scholars beavering away

There are some 150 scholars from the USSR and East Germany working flat out to produce a new complete edition of every word written by Marx and Engels. It seems a hopeless task.

The edition, the new *Marx-Engels Gesamtausgabe* (MEGA) will run to more than 100 volumes, and will replace the famous edition begun in 1927 by Razdanov and Adoratski and completed in the late 1930s.

Each volume, available at a fixed price of D134 and printed in Leipzig, contains sections of text and accompanying notes and references. The scholars are working in four departments - articles and letters by Marx, *Kapital*, letters, notes and other materials, and are examining all original texts stored mainly in two institutes in Moscow and Amsterdam. The books will come out in the original languages used by Marx and Engels.

So far 18 volumes have been produced, in more than 10 years' work. But just as the scholars beaver away, so the task keeps growing. New letters and documents are always being discovered.

The labelling of historians

What is a Marxist historian? This was a question primarily raised in Professor Eric Hobsbawm's paper; but indirectly it applied to every paper at the conference. Perhaps every historian present was Marxist; yet their approaches were quite different.

Marx himself did not produce much as a historian, except perhaps his *Secret Diplomatic History of the Eighteenth Century*, which Hobsbawm said could safely be confined to the wastebin. But he wrote historically, albeit contemporary analyses such as *The Class Struggle in France* or *The Eighteenth Brumaire*, or articles written in 1850s and 1860s. "Who cannot fail to be impressed by reading *The Eighteenth Brumaire*?" Hobsbawm asked.

But, he went on to say, it is arbitrary and artificial to the economist, Marx the sociologist, and so on. His writings are of interest to historians on three levels. First, there are writings on the materialist concept of history, best known in the preface to the *Critique of Political Economy*. For Hobsbawm this is the core of Marx's work. "It is that circumstances determine men's ideas rather than the other way round, as I learnt at university," he explained later.

Then there are sketches of the general development of human history from primitive communism to capitalism and beyond, found in the *German Ideology* and the *Grundrisse*. Finally are the variety of descriptions and analyses of concrete problems, for example the famous chapter on primitive accumulation in *Kapital* volume one.

Marxist historians, then, use "historical materialism", but as a Swiss historian pointed out what this means is also a substantive question. Marx nowhere spells out his method. According to Hobsbawm this is due in part to the fact that his views were constantly evolving in part that he rarely completed projects, and in part because

he was studying in reverse chronological order - looking at the age in relation to developed man, taking developed capitalism as the starting point. Later Marxists would have to discuss the early history.

Professor Shlomo Avineri adds another distinguishing feature for Marxists: they have an emancipatory vision of the future, which determines the kind of problems they analyse, and why. They look at the "main stem" of society. "All history is the history of class struggles," in Marx's famous dictum. But there is no need to focus for example on the life of "ordinary people". Marx himself wrote surprisingly little about "ordinary people". But Marxists do set out to weave the whole social picture together. Often their real revelation is showing how things are fitted together, says Hobsbawm.

Marx's influence on modern history has, he said, come in three ways: through historians applying his method; through critics of his method, sometimes like Max Weber, devising alternatives; and through the penetration of his ideas into the general body of historical science. There is for example a growing body of ex-Marxist historians who retain much of Marx's method.

The most notable illustration is how ideas are no longer used as an explanation of history, but social forces are: Political, religious, and institutional history, in the narrow sense have all declined, and socio-economic history is far more prominent that it was 100, or even 50 years ago.

Hobsbawm himself accepts the description that he is a Marxist historian. But with so many Marxist orthodoxes, he agrees the term does lose its meaning. Avineri dislikes being labelled. The extent of Marxist influence is, as Hobsbawm said, that it is not always possible to tell the difference between "Marxist" and "non-Marxist" historians unless it is advertised.

The author is principal lecturer in history at Kingston Polytechnic.

BOOKS

Exploitation without class

by Peter Abell

A General Theory of Exploitation and Class
by John E. Roemer
Harvard University Press, £22.00
ISBN 0 674 34440 5

The almost irresistible attraction of Marxian doctrine derives from the way in which it holds out the promise of a theory of historical movement which claims, at one and the same time, to be both scientifically predictive and suggestive of the moral liberation of mankind. The potent alchemy of its claims and scientific pretension, which when reduced to its basic elements proclaims that things must ultimately tend towards a form of economic, political and social organization where man no longer exploits man, seem only too easy to move the most obstinate of the imagination. Under Marx's scholarly direction mankind's own peculiar drama becomes nothing more than a protracted, but finally victorious, struggle to reflect an initial fall from grace - that is from primitive communism.

The central theme in this drama is the exploitation of one class of men by another and the driving force which inevitably propels us from the opening in the final act through a series of exploitative "modes of production", is the motivation of the exploited class to appropriate the exploiting class. From a Marxist perspective then much revolves around the concept of exploitation. If the Marxist theory of exploitation fails then the Marxist theory of class fails, the driving force of history must be sought elsewhere, the liberation of mankind is no longer guaranteed and the final act of the drama must be rewritten.

Marx, true to his materialist predilections, needed to enhance his objective measure of exploitation through he gave short shrift to those for whom the evident disparities in fortune between the rich and the poor were transparently obvious in this respect, his own insight was to formulate the idea of exploitation in terms of labour-time: if he argued, economic institutions are organized in such a manner that one man needs to labour for a period longer than that which is necessary to produce his own subsistence needs, then he is exploited and whoever stands to benefit from his "surplus labour" is ipso facto exploiting him. It was a short step from this conception to the labour theory of value.

It is, and was to Marx, entirely evident how exploitation arises in societies based upon slave and feudal productive relations. At the threat to life and limb, the slave is coerced to toil for a far longer period than that which is needed to produce the goods he consumes and likewise the ties of bondage of the serf require him to perform corvée and domesticate labour. But with the advent of industrial capitalism and labour markets which are apparently free (uncoerced) Marx faced a paradox: labour is free, but at the same time in his terms systematically exploited - how could this be? He constructed a complicated theory in which the private ownership of the means of production was the necessary condition for such exploitation.

John Roemer in a remarkable but highly technical book sets out to analyse this theory. He starts, however, by suggesting that we now face a paradox of our own which parallels the one which perplexed Marx. We confront the socialist societies where, despite their banishment of the private ownership of the means of production, it is difficult to evade the conclusion that exploitation is still taking place. Is there, he asks, a more general theory of exploitation in which Marx's theory is but a special case?

Before, however, such fundamental issues can be addressed

series of abstract economics, the structures of which are designed to elucidate the precise nature of Marxian exploitation and theory of class, a number of surprises, damaging to Marxian doctrine, occur on the way. Like Marx before him, Roemer starts with simple subsistence production here, individual producers with identical skills (homogeneous labour), differentially endowed with production goods, but all facing the same sort of technology (fixed proportions of input per unit of output, that is, a Leontief technology) and, finally, their labour time and trade to satisfy their identical subsistence needs. There is no labour market, thus, no employment and no capital market; nevertheless, the less well endowed work for longer hours than the better endowed. That is in a sense the former experience a type of Marxian exploitation despite the absence of a clear class boundary wherein capital employs labour. Not surprisingly, an assumption whereby the initial endowments are equally distributed surrenders the result that all work for the same time. Roemer draws what he regards as the distinctly non-Marxian conclusion that exploitation is annihilated purely by the exchange of commodities and the unequal ownership of the "means of production".

We have, as it were, "exploitation without class". One might, of course, reasonably ask: whence the unequal endowment of production goods, which is, after all, responsible for unequal labour times? Roemer's reply would be that the whole exercise is merely a logical one to demonstrate the point that "surplus labour" can be extracted even in the absence of the employment relation.

The next obvious step is to introduce a labour and a capital market: Roemer does so, and in this order rather than together, such that the implications of each can more easily be discerned. With a labour market (and still assuming a uniform Leontief technology and identical subsistence consumption) each producer contends, in the light of his initial endowments of production goods, the problem of finding an optimal mix between working for himself, employing others and hiring his own labour to others. Roemer's central result is what he terms the "Class Exploitation Correspondence Principle" (CECP): it shows that there is, at a reproducible solution in the economy, a perfect rank order correlation between five disjoint class positions (capitalists, who optimize only by hiring others; small capitalists, who both hire others and work for themselves; petty bourgeoisie, who only work for themselves; semi-proletarians, who both work for themselves and hire out their labour; and proletarians, who only hire labour) and both labour-time (ie. exploitation) and wealth. Indeed it is the semi-proletarians and full proletarians who always work more time than that which is needed to produce the (subsistence) consumption and the capitalists that work less.

When a capital market, rather than a labour market, is introduced into the subsistence economy, individuals must optimize either by using their own endowments, or by borrowing or by lending. Once again at a reproducible solution there are five "financial positions" and these, running from "pure lenders" to "pure borrowers", are perfectly intercorrelated with labour-time and wealth. That is to say a theorem which is isomorphic with CECP still holds, and exploitation takes place: circulation of capital, this observation underscores the early one showing there is nothing in institutions of the labour market which is intrinsically necessary for hanging about the phenomena of Marxian exploitation and class. All this will come as somewhat of a jolt to those who, seeking to liberate man from the capitalist



The central figure from Alexandrovich Deyneka's 1956 painting "The Tractor Driver".

in which labour hires capital rather than the reverse.

The significance of these results, wrested from some rather abstruse mathematics, is, Roemer believes, that they invalidate Marx's view, which would find the prime locus of exploitation (extraction of surplus value) in the labour process at the point of production. Rather he contends it is to be found in those institutions which maintain the differential ownership of productive assets. Some will no doubt regard this as a rather fine distinction and also query the utility of models which assume an unequal distribution of initial endowments which cannot be accounted for within the model itself. For after all is said and done it is primarily this assumption which generates the pattern of unequal labour times. Roemer's response is direct; the models so far are not candidates for any given historical reality but merely a logical exercise to ascertain the institutional arrangements which are necessary for the production of Marxian-type exploitation. In the second part of the book we move on to more realistic accumulating economies.

When economic agents seek to accumulate wealth rather than minimize their labour time in order to guarantee themselves a subsistence existence - then does the CECP hold? Before Roemer can, however, address this question he has to tinker with the Marxian concept of exploitation; he needs a notion independent of the idea of subsistence. This is his first major departure from pure Marxian orthodoxy, for Marx tried, rather unhappily, to stay with his subsistence concept even within the framework of capital accumulation. Roemer adopts the following ("Marxian type") definition: an agent is exploited if here is no bundle of

which embodies as much labour time as he/she contributes, and conversely is an exploiter when he/she can purchase goods embodying more labour/time than he/she contributed. Labour is still assumed to be homogeneous and the technology of the fixed proportions Leontief type. It turns out that a version of the CECP does hold under both these assumptions and this concept of exploitation, ie. the labour sellers are exploited and the labour buyers exploiting. There are, however, at equilibrium for a reproducible economy a large number of agents in a "grey area" who are neither exploited nor exploiting. In fact society is now decomposed into four classes: the pure hirers, the pure sellers (of labour), those that operate their own production and those who do all three things. But the robust fact remains; to employ is to exploit and to sell one's labour is to be exploited.

So far all agents have been assumed first to have equal access to a type of technology where fixed proportions of inputs generate a unit of output and in the second place to be endowed with identical "undifferentiated" resources (ie. skills). But is CECP able to survive the relaxation of these assumptions? Roemer introduces a constant returns to scale technology (in the jargon convex cone technology) and once again shows that CECP is robust enough to survive the journey but only if, from a Marxian point of view, a most heretodox travelling companion is taken on board. If the Marxian type concept of exploitation is preserved the CECP is false; that is to say wealth, class position and labour time no longer stand as neatly ordered proxies for each other. So either the concept of exploitation or CECP must be thrown overboard. To cast CECP to the winds would indeed have profound implications: exploitation and class would no longer stand together fuelling the motors of historical change and the liberation of mankind. Far safer to sign up a concept of exploitation which will keep CECP on board. This Roemer, with some ingenuity, does, but only at the expense of making the value of labour dependent upon equilibrium prices. Classical Marxists has always contended to keep labour values solely dependent upon technology and logically prior to equilibrium prices.

Although these heroic efforts have been questioned recently, in avowedly Marxist circles, none has so far been as audacious as Roemer. Not daunted by his heretodox stance he claims that a price-dependent measure of labour input actually captures, to use the Marxian vernacular, "value as a concept which adheres to goods produced in capitalist production not simply goods as such". Thus, a definition of exploitation dependent not only upon technological constraint but the "going rate of profit" (ie. prices) embraces the "capitalist imperative". Labour-value is social necessary labour given capitalist relations of production.

So far so good - but what about differential skills? It has been known for some time (Marxists) that "heterogeneous" labour proves extremely problematic for the Marxian theory of exploitation. Again from Roemer's particular standpoint CECP is at the centre of things since, now, class position no longer rank orders with wealth but with labour provided (quantity and quality) and it becomes possible for wealthy producers to become exploited and poor producers exploiting. Marxists have reacted to this possibility by pointing out that as capitalist society polarizes (another Marxian assumption) or theorem depending upon how he formalizes Marx's, then empirically speaking, the appearance of anomalies is of no significance. But for those of us who wish to preserve something of the Marxian idea of historical movement without the letter of

reply - The inequalities of income and life chances within the class of persons who hire their labour is something which profoundly affects the class-dynamics in contemporary capitalism. Roemer quite rightly sees the analytical problems surrounding heterogeneous labour as one factor limiting the development of a more general theory of exploitation of which the Marxian homogeneous labour model is a special case.

We clearly need to revert to basic principles, with our experience of Marxian serving both as an inspiration and a cautionary tale. The essential issue is why should inequalities be regarded as exploitation in the first place? For instance, in the abstract models which Roemer so painstakingly takes us through - why should differentiated labour-times be labelled as exploitation? Producers are, given their initial endowments, clearly better off (Pareto-wise) in all the economies (subsistence and accumulating) when they trade to a reproducible solution (ie. a Pareto optimum) as Marx noted they freely enter into various contractual relationships. The anomalies which occur in relation to differential skills are, to the neo-classical economist, quite natural and just - the transfer of surplus labour time from one agent to another and any accumulation of wealth, which is self-evidently exploitative, is a Marxist, is perfectly acceptable for the neo-classicalist. It reflects differentiated contributions to marginal products, under perfect competition. Is there a way of adjudicating between these different "normative" interpretations?

Roemer thinks so. He adopts a game-theoretic approach to exploitation which enables him to distinguish between what he terms feudal, capitalist and socialist exploitation. In so doing he, along the way, accomplishes two of his major objectives: to continue Marxian-type exploitation as a special case of capitalist exploitation and to provide an analysis which sees societies where the means of production have been nationalized/ socialized also as exploitative. He in a sense reverts to the deepest Marxian insight whereby property relations are what we must pay attention to in a historical analysis of exploitation and not to the extraction of surplus labour time, which is only applicable in unfavourable circumstances.

But where does all this rather abstruse theorizing leave the Marxian concepts of class and class dynamics? Is the divide between the exploiting and exploited classes in contemporary capitalism sufficiently recognizable for it to provide a locus for political mobilization? Roemer's analysis, though Marxian in inspiration, should (but I doubt it will) put paid to any straightforward reliance upon the labour theory of value and the extraction of surplus labour in this respect. Despite some rather simplistic efforts to preserve clear-cut class boundaries (Poulantzas, Castells, and so on) it is apparent to all but those who for ideological reasons wish to preserve the detail of Marxian doctrine, that it fails to address the complexities of contemporary capitalist society. It is not only a matter of Roemer's "grey areas" but also the fact that in calculating one's class interest one must balance one's lifetime welfare expectations under present arrangements (including the probability of being mobile in and out of the property-owning class) against such a tenuous alternative. No doubt the cross-cousin patterns of conflict between mobilized interest groups will, if we manage to survive the doings of the likes of Thatcher, Reagan and Andropov, lead us somewhere - maybe to a more just and open society - but to place exclusive faith in a dynamic articulated around Marx's kind's access to property is to succumb to a form of Marxian plety which is breathtaking in its naivety.

Peter Abell is professor of sociology at the University of York.

BOOKS

Across a divide

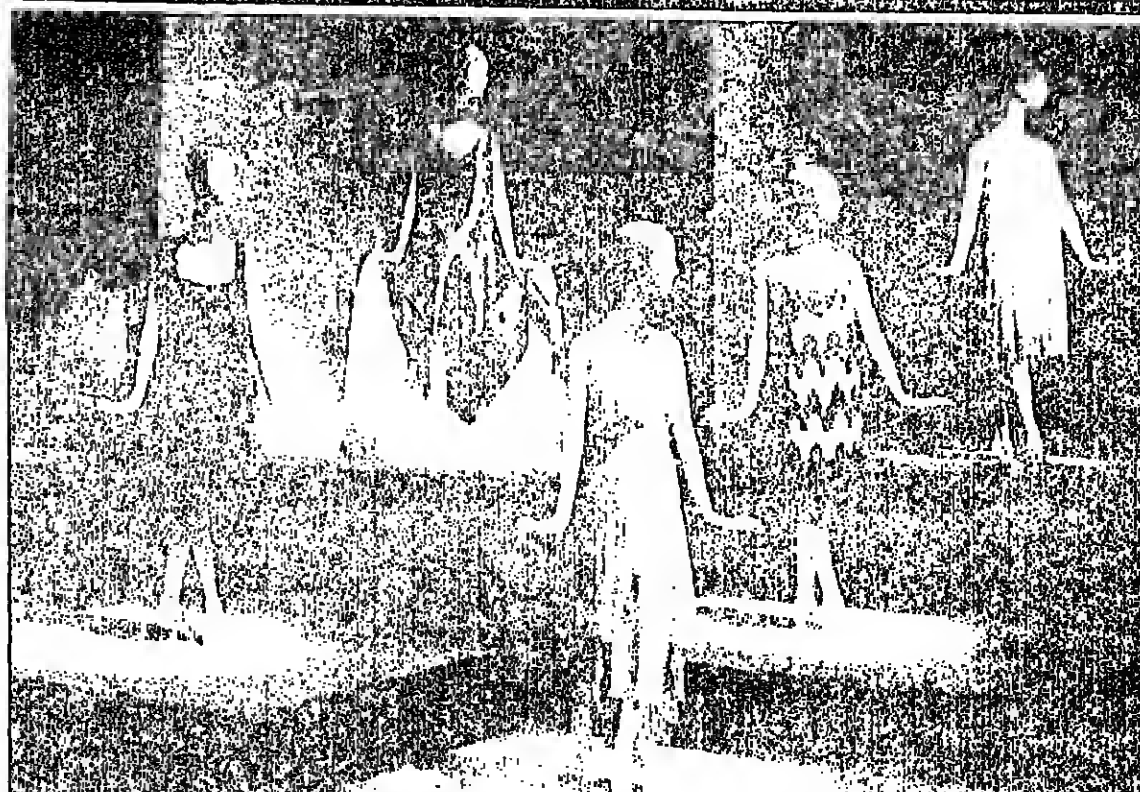
The Light in Troy: Imitation and discovery in Renaissance poetry
by Thomas M. Greene
Yale University Press, £21.00
ISBN 0 301 02765 6

Dunbar's translation of the Aeneid includes references to "Sir Diomed", "slangy chaffers full of chivalry" and to the "mus of Barchin". The Scottish poet translates in this way because he has no adequate grasp of the differences between the ancient world and his own. Professor Greene argues that the best Renaissance imitative poetry is likewise anachronistic - but in a very different way. It was the particular achievement of Renaissance humanists to become aware of the *otherness* of ancient civilization: comprehension of the texts they sought to restore entailed recognition of the fact that history is not a continuum and that, though ancient societies might be increasingly understood, they could never be restored to life.

The sense of fulfilment created by an increasingly detailed knowledge of the civilizations of Greece and Rome brought with it, therefore, a marked sense of privation. Professor Greene argues that the best imitative poets learned how to exploit this sense of cultural distance. Slavish attempts at imitating a "Great Original" led to failure, as in the case of Petrarch's neo-Latin epic, *Africa*; but a deliberate policy of highlighting the difference between one's model (with which the literate reader is expected to be familiar) and one's own poem creates a diachronic interplay between two cultural worlds, which emphasizes the personal nature of the poet's vision. Thus, *Canzoniere* 90 differs from its sobriety in the Aeneid (Aeneas's encounter with Venus) because of the way in which Petrarch plays on the ambiguity of Laura's creaturely status: Venus is a goddess who looks like a woman; but Laura is a woman who, having once resembled a goddess, has now lost her divine aura. The discrepancy between text and subtext enables Petrarch to reverse the "epiphanic revelation made to Aeneas" and to create "a deliberate admixture of nostalgia" and "a hovering regret at Laura's decline".

Intertextual criticism of this kind is now widely practised; but Professor Greene suggests that "We have not been adept as literary critics at accounting for imitative successes as against the many failures, or at recognizing the variety of strategies imitative writers pursued". It is in order to "sketch in" some proposed solutions to these problems that he surveys the theories of imitation advanced in classical antiquity, the Middle Ages and the Renaissance, and provides us with a series of studies of the ways in which these theories were put into practice. Petrarch receives the most detailed attention because of his role as a forerunner and as a catalyst; but shorter sections are devoted to Poliziano (debate with Paolo Cortesi, *Stance contrafatta per la giostra di Giovanni de' Medici*), Ronsard (*Annonis* of 1552-3), Du Bellay (*Defense, Antiquite*), Sir Thomas Wyatt, and Ben Jonson.

I am not sure that Professor Greene succeeds in showing that literary imitation made a different impact on "each nation and vernacular it touched". Petrarch is a law unto himself, and is as different from Poliziano as he is from Du Bellay. Also Du Bellay and Ronsard are presented here as exploiting imitation in two radically different ways: the former dramatizes the humanists' failure to resuscitate a dead past, while the latter sees himself as a serene demagogue. From this point of view, Ronsard is nearer to Jonson (whose poised and self-confident transpositions indicate a diminishing feeling of cultural shock) than to his countryman. I am not convinced either that Petrarch's description of his alleged ascent of Mont Ventoux is a "failed imitation". The conflict between the *mundi significantes* of



Short evening dresses from the 1920s displayed at the Costume Institute of the Metropolitan Museum of Art in New York. The picture is taken from Shirley Miles O'Neil's book *American Costume 1915-1970: a source book for the stage costume*, published next week by Indiana University Press at £16.50.

Livy and Augustine is revealing precisely because it reflects the "toxic" morose irresolution that Petrarch displays in so many other domains. These, however, are mere quibbles in comparison with this study's undoubted worth. Many of the chapters are too short to be anything more than suggestive; but Professor Greene shows admirably that imitation can be understood and practised in a variety of different ways, that it can accentuate rather than reduce the poet's originality, and that it was a central technique in the humanists' attempt to salvage something from the cultural holocaust symbolized by the sack of Troy.

James Supple

Dr Supple is lecturer in French at the University of St Andrews.

Dramatis personae

Eugene O'Neill's New Language of Kinship
by Michael Manheim
Syracuse University Press, \$22.00 and \$12.95
ISBN 0 8156 2262 7 and 2277 5
Eugene O'Neill
by Norrmond Berlin
Macmillan, £10.00 and £2.95
ISBN 0 333 28499 2 and 28501 8

It is undeniable that O'Neill's personal experiences were the stuff of his plays to a greater extent than for any other American playwright. The despair of the early works - obsessed with decay, dissolution and death and dominated by images of constriction and apocalypse - is deeply rooted in a private life which was nothing if not melodramatic. His father, the famous nineteenth-century actor, may have performed in melodrama; O'Neill lived it.

By the time he offered *Bound East for Cardiff* to the newly formed Provincetown Players he had already discovered his mother's morbidly addicted, married and abandoned the woman who had borne his child, suffered from TB and attempted suicide. He had prospected for gold in South America and lived as a drunken dervish. In view of this it might seem strange to resist a book which attempts to decode O'Neill's texts precisely in terms of autobiography. But Michael Manheim's application of the personalities of the O'Neill household is so relentless, repetitive and mechanistic that resist one must.

The problem is that this is a psychological study without the psychology. Terms like "guilt", "self-hatred" and "hostility" are deployed in a context in which we are offered

neither a very detailed analysis of the lives and relationships of the O'Neills nor anything more than a time-worn version of psychological theory. The text wanders from the sparsely confident, in which the by no means demonstrable is introduced as "undoubtedly" or "clearly evident" through to the confessedly anxious - "it may well be", "it could be", "perhaps".

Normally Manheim seems to rely on the self-evident nature of his observations. Thus he says of a character in *The Hairy Ape* that the fact that "Milked is on the one hand shy, delicate and elegant, and on the other hand deeply confused about her life suggests strongly that O'Neill is again dealing with his mother", or later of the figure of Marco Polo in *Marco Millions* that "his behaviour can only be explained, it seems to me, with reference to O'Neill's severe self-hatred arising from his recent treatment of his dying mother." That both could have been a consequence of the exigencies of plot or his perception of the dramatic necessities of character seems too banal to consider. If characters seem to correspond to members of O'Neill's family they are seized upon as "parallels"; if they do not they are seen as "distortions" or "opposites", as though that family were the only legitimate source of reference. If, in *Marco Millions*, it becomes difficult to sustain the centrality of O'Neill's hatred for his mother this can only be because he has "temporarily suppressed his hostility towards his mother and is concentrating only on his guilt".

Eventually this method leads Manheim to the absurd. The figure of Tibullus in *Lazarus Laughed* represents not only James O'Neill Senior but also both O'Neill brothers, while in *A Touch of the Poet* his mother even becomes a horse. He similarly begins to play fast and loose with evidence he suggests that "memories of his mother were roiling O'Neill's sex life, or conversely, the persistent amorous demands of a wife were interfering with his reveries about an idealized distant past with his mother." The trick is that he is not so much speaking from a knowledge of O'Neill's private self as intuiting from the plays, having so successfully convinced himself of the legitimacy of the parallel that the distinction between fiction and the real has all but disappeared.

What writer does not people his or her work with phantoms from their own lives, fragments, aggregations, ironic transpositions, and so on? The important question is to what end do they do so. Precisely what difference does this make to our approach to the work? My fear is that in his quest for versions of O'Neill's family Michael Manheim diminishes the complexity, evades the weaknesses, underestimates the achievement and reduces the imaginative accomplishment of the plays. He seems to see

O'Neill as producing a gallery of biographic portraits of his father, mother and brother and, as with biographic portraits, the effect is to drain the lives out of these characters.

A rather more rewarding account of O'Neill's plays, mostly devoid of psychological speculation, can be found in Norrmond Berlin's *Eugene O'Neill*, a recent addition to the Macmillan Modern Dramatists series. This is less imaginative than Manheim's book and is plainly directed at a wholly different market but for those who want a sensible introduction to O'Neill's work, albeit one which breaks little new ground, this is not without its value. At least it concedes to its subject an intelligence and an imagination not entirely in thrall to memory and conscience.

C. W. E. Bigsby

Dr Bigsby is reader in American literature in the school of English and American studies at the University of East Anglia.

First versions

Brecht's Early Plays
by Ronald Speirs
Macmillan, £20.00
ISBN 0 333 28555 6

Dr Speirs's aim is to subject Brecht's major works up to *A Man's a Man* (1926) to the detailed examination which has hitherto been reserved for his later plays. In addition to the largely sympathetic and admirably close readings of *Baal*, *Drums in the Night*, *In the Jungle*, *The Life of Edward the Second of England* and *A Man's a Man*, the volume contains a short account of the operas and a concluding survey of the *Lehrstücke* and beyond.

Rightly suspicious of any approach to the works as proto-Marxist exercises or mere staging-posts on the journey to a Theatre of Alienation, Dr Speirs argues that Brecht's early plays need to be interpreted in their own terms with regard to both form and content. Not only does he consider Brecht's hindsight remarks about them very sceptically but also sees his subsequent Marxist versions of early plays as an obstacle to their understanding.

Thus, instead of any orthodox preference for the definitive edition, always a vexed issue in Brecht's case, we have here an axiomatic preference for the first version - even where (as with *Baal*) the changes made in later versions are not simply "Marxist corrections", but also represent the kind of continual refining and rethinking to which Brecht invariably subjected his work.

J. J. White

J. J. White is reader in German at King's College London.

THE
Special
feature
on
microfilm
Publishing
Feb 11th

BOOKS

The place of art

The Critical Historians of Art
by Michael Podro
Yale University Press, £15.00
ISBN 0 300 02862 8

At an early point in this beautifully illustrated book Michael Podro refers to Rubens's painting, *Comp de Lance*, which depicts the crucified figure of Christ being pierced by the spear of a passing horseman to see whether he is dead. Podro invites us to consider whether this picture, if shown to a spectator who belonged to a non-Christian culture, could be experienced by him as having the force, the poignancy, which it would possess for one who approached it from the standpoint of Christian ideas and beliefs.

In doing so he draws attention to a problem which occupied a central place among the issues that influenced the historiography of the visual arts as it evolved in Germany during the greater part of the nineteenth century and the first quarter of the twentieth. For it was in this seminal period that a succession of gifted writers confronted the difficult task of tracing the connections between literary and artistic works from a historical point of view and treating such works as realizing creative possibilities that transcended the social and cultural contexts in which they were produced. As Podro himself puts it, the aim of critical history was to understand how the products of art sustain purposes and interests which are both irreducible to the conditions of their emergence as well as inextricable from them. And its practitioners can be regarded as having attempted, albeit in widely varying ways, to construct an account of art and its development which was sufficiently subtle and flexible to be able to do justice to both these concerns.

Podro contends that the two themes which he sees as underlying the writings of the critical historians – the notion of art as exhibiting "freedom of mind" and the conception of it as a historically-conditioned activity whose products are none the less accessible in the mental life of the present – had their source in certain suggestions that were originally advanced in the field of philological aesthetics. Thus on the one hand Herder, with eighteenth-century ideals in view, had challenged the assumption that all works of art could be judged by some single standard and had emphasized the need to evaluate artistic products in terms of the particular cultural circumstances in which they arose. And on the other Kant and Schiller, while not sharing Herder's historical perspective, had emphasized the mind's capacity to withdraw from the pressures of everyday existence and to experience itself instead in a free or spontaneous play of its powers; according to Schiller, such freedom of response was pre-eminently exhibited in the artistic control over his subject matter and in his ability to "subsume it within an order of his own making". It was, however, Hegel who, by intertwining the themes of freedom and historicity within a systematic general theory of art, constituted in Podro's opinion the primary philosophical influence upon the critical historians; with their metaphysical overtones of the Hegelian account they have held little appeal for them; even so, some of the methodological implications were

generations of art historians.

The major part of Podro's essay is devoted to an examination of the foremost figures of these generations, Schlegel, Semper, Burckhardt and Springer, being singled out as representative of the first, Riegl, Wölfflin and Warburg as representative of the second, and Panofsky as representative of the third. Each of these writers is subjected to detailed consideration, the differences between their respective approaches being explored in the light of certain guiding principles and preoccupations. Whereas some are presented as subscribing to positions which partly echo Hegel's teleological outlook, others are seen as reacting against this by treating the development of new artistic styles as arising in a piecemeal fashion which involved the adaptation in fresh uses of specific techniques or "motifs". Again, while some were disposed to regard art as originating in an essentially contemplative attitude towards the world, others envisaged it rather as being continuous with various forms of human behaviour and social practice. And although some followed Hegel in endorsing the notion of art as reflecting or expressing the life of a culture, there were also those who wished to emphasize the autonomy of artistic creation and the importance of understanding stylistic changes or transformations in exclusively artistic terms.

The resulting survey, which is conducted with scrupulous care and discrimination, is of interest for a number of reasons. Not only does it shed

light on a rich and fascinating period of critical activity; it is also of value in illustrating the ways in which philosophical theorizing, even when this is of a highly speculative character, may impinge upon the actual pursuit of art criticism and exert a significant influence upon its direction. Furthermore, it serves to show how many of the problems with which the critical historians were dealing remain live issues at the present time: as Podro himself indicates, there is still much to be learned from what they wrote, even if the arguments they used, and the answers they gave to the questions they had raised, can appear inadequate from the standpoint of more recent philosophical and psychological approaches.

Where his study seems to me less satisfactory is in its mode of presentation; this is somewhat oblique and densely-textured and does not make for easy understanding. Podro works with a very fine brush which, though admirably suited to the depiction of matters of nuance or detail, is not so effective as an instrument for drawing firm outlines. It is not difficult to appreciate the subtlety and finesse with which he handles individual points and distinctions. But there are occasions all the same when one would be grateful for a clearer delineation of the overall design.

Patrick Gardiner

Patrick Gardiner is a fellow of Magdalen College, Oxford.



Georges Seurat's crayon drawing of "The Gleaner" (circa 1883), taken from Anthea Callen's book *Techniques of the Impressionists* (Orbis, £12.50).

Reports at first hand

Historical Writing in England, volume two: c 1307 to the early sixteenth century
by Antonia Gransden
Routledge & Kegan Paul, £30.00
ISBN 0 7100 0480 X

The second volume of Antonia Gransden's *Historical Writing in England* brings to a close her comprehensive survey of historical works in the medieval period. To have completed such an undertaking, single-handed is something of a tour de force for although some late medieval chronicles have been well and critically edited, many exist only in old and inadequate editions; some are subject to conflicting interpretation, others have been neglected. In spite of the difficulties, Dr Gransden successfully presents almost all the known narrative sources.

During this period interest in history remained widespread; but patronage and readership changed, and the balance of historical writing gradually shifted away from the monasteries. With a wider by audience the old-style general chronicles, beginning with the creation of the world or the incarnation, gave place in popularity to anecdotal compilations like the *Polychronicon* of Ranulf Higden. During the wars with France patriotic and chivalric histories, always popular with the knightly class, increased in number. Traditional legends of Arthur and Brutus were still almost universally accepted; but if national origins were shrouded in myth, most writers reported with vivid and accurate detail on the contemporary scene. Royal ceremonial battles, pageants, riots, even executions, were graphically described. Newsletters were given accounts of campaigns and diplomatic negotiations became available to chroniclers; they widened the scope of accurate reporting, though they might become instruments of propaganda. Indeed, during the fifteenth-century wars of succession, historical writing was increasingly liable to be used as propaganda, both at home and abroad. The *Activall of Edward IV*, for example, was a propaganda tract intended to win acceptance for the Yorkist cause in France and Burgundy, no less than in England.

The older type of monastic chronicle survived in an attenuated form; but in spite of a brief flowering in the late fourteenth century, most chronicles were concerned principally

with the affairs of the abbey where they were written. Meanwhile city chronicles, notably the London Chronicle, catered for the interests of the merchant classes. A growing number of secular clerks and laymen, some of whom had served in the royal administration or as diplomats, turned their hands to writing contemporary history or biography.

Social change showed itself in the content no less than the authorship of chronicles. Episodes in the revolt of 1381 were described by some writers, peasant unrest appeared more subtly. Thomas Burton's account of the laws of his abbey of Meaux, which include one against its own discontented villagers; or in John Rous's indignation at the rural distress resulting from the enclosure movement.

Intellectual interests, too, were modified. Antiquarian studies, never wholly absent in the earlier centuries, became more prominent; two fifteenth-century scholars in particular – the secular clerk John Rous, and the "gentleman bureaucrat" William Worcester – are remembered chiefly as antiquaries. But in spite of all the changes, Dr Gransden rightly emphasizes the strength of the traditional elements in historical writing, even in the work of such humanist historians as Polydore Vergil and Sir Thomas More, who developed the classical tradition of rhetoric, and laid greater emphasis on natural causation than their forerunners had done.

Inevitably, in a work so packed with detail and arranged partly chronologically, partly by subject, there is some overlapping and repetition. There is also, occasionally, inconsistency; for instance, the poet William Langland is a clerk in order 221. Inevitably, too, fresh research will modify some specific judgments. Already the edition of the West-Saxon Chronicle has been outdated by the edition of Harvey and Hieston; and John Blacorn's biography of Henry VI, here dismissed (in accordance with a widely-held view) as "poor," has been shown by Roger Lovell to be an important insight into the mentality of Henry VI and a mirror to the piety of its scribe.

The book stands, however, as an indispensable work of reference, superbly indexed and supplied with detailed bibliographical references, an invaluable aid to medieval studies for many years to come.

Marjorie Chitham

Marjorie Chitham is a fellow of Clare Hall, Cambridge.

After the war

Spain 1808-1975, second edition
by Raymond Carr
Oxford University Press, £19.50 and £9.95
ISBN 0 19 822127 4 and 822128 2

Few historical works published in recent times can truly be considered milestones in a nation's historiography. One which can is Raymond Carr's *Spain 1808-1939* (1966), the first serious synthesis of nineteenth and early twentieth-century Spanish history and still incomparably the best.

It was, especially in view of the dearth of monographic material then at Carr's disposal, a phenomenal achievement. Huge in scope and sensitive in its grasp of Spanish realities, its insights subtle, illuminating and often provocative, and the entire volume infused with its author's scepticism but humane liberalism. Neither in the English-speaking nor the Hispanic world is there an historian of modern Spain writing today who is not indebted to Carr.

For teachers this was nevertheless a frustrating book, its delights hard to share with those not already immersed in things Spanish. For Carr was and remains a specialist writer for specialists – and for Spaniards, who bought the Spanish version of *Spain 1808-1939* in enormous numbers. Reading him demands not only some familiarity with his subject matter but also some insight into its setting; not a man for chronological or gratuitous explanation, he moves rather via the flashback, the foreground glance, the cross-reference, the pertinent quote and the punchy one-liner. Easy to enjoy, he is not, for those ill-equipped to meet him on his own ground, easy to digest.

Now we have a new edition of this classic work. To be precise we have a reprint of the first, minus its last two paragraphs and extended by two new chapters to cover the Franco regime and its demise. And why not? However desirable a complete revision might have been, Carr can scarcely be blamed for not embarking on one, especially since his own recent work has largely concentrated upon the years dealt with in the new chapters. To reread the reprinted material, moreover, is to appreciate how well most of it stands up.

This is partly, no doubt, because the revival of Spanish historical scholarship since the 1960s has, for understandable reasons, focused disproportionately on the 1930s to the

continued relative neglect of the nineteenth and very early twentieth centuries where the heart and real strength of Carr's book always lay. Consequently, if the sections dealing with the 1930s do now look seriously dated, the bulk of what was the first edition still commands confidence and admiration. As for the new chapters, their content and argument already familiar in more detailed and discursive form to readers of Carr's collaborative work with J. E. F. P. *Spain: dictatorship to democracy* (1979), they are as informed, balanced and vigorously presented as all that has gone before.

Why, then, should this new edition arouse a tremor of dissatisfaction? Because, I think, *Spain 1808-1939* possessed a unity which *Spain 1808-1975* has lost. Carr's original theme, "the failure of liberal revolution", certainly attracted some criticism, among other things for its emphasis on political failure, its alleged Anglo-Saxon ethnocentrism, and an unstated preoccupation with explaining a civil war which, it was suggested, had Carr politically and intellectually spellbound. Fair or not, such reactions illustrate the theme's impact: *Spain 1808-1939* closed with a short, saga, retrospective lament over the poor prospects for nineteenth and twentieth-century Spanish liberalism. This has now gone; from the words "the Civil War was over" we enter the long reign of Francoist illiberalism, to and this time with a brief expression of hope concerning Spain's immediate future. Carr's new chapters thus sit uncomfortably with the old, not because they are better, or less good, or fresher, but because they do not – perhaps cannot – contribute to the original theme of the book.

The final impression resembles that left by those attempts to "complete" Schlegel's *Eighteen* by adding material from elsewhere in the canon; the result is a patchwork of the past and the present, and the result is to what is unintelligible, not merely false.

Martin Blinkhorn

Dr Blinkhorn is senior lecturer in history at the University of Lancaster.

The nearly 350 short biographical accounts contained in *Who's Who in Nazi Germany* are designed by their author, Robert Weisbach, to reflect "the multitude of cross-cooperations that made up Hitler's Germany". Individuals covered include not only Nazi SS and Gestapo personnel, but also civil servants, industrialists, intellectuals, churchmen, academics, artists and entertainers. The book is published by Weidenfeld & Nicolson at £10.95.

BOOKS

The God of Theism

The Miracle of Theism: arguments for and against the existence of God
by J. L. Mackie
Clarendon Press: Oxford University Press, £12.50 and £4.95
ISBN 0 19 824655 X and 824682 X

Published after the author's death, this book operates within the following conception of philosophical justification:

Our beliefs in an external world, in other minds, and in the general reliability of inductive reasoning are all initially non-rational. We merely find ourselves believing these things, as James would say, for no reasons worthy of the name. That is why, when the sceptical doubts are raised, we at first, and perhaps for quite a long time, find them unanswerable. Not having reached these beliefs by any process of reasoning, we have no arguments prepared and ready with which we could reply to the sceptic. Nevertheless such arguments can in the end be found. In these cases faith can seek and find the understanding to support it. And when understanding has thus supported it, our belief in these matters is not thereby undermined or corrupted (pages 214-215).

Although we may begin by acting in certain ways, these ways depend for their sense on the support which rational argument provides. Religious ways of acting need such support too and claim to find them in the arguments of theism. But these arguments do not work. Mackie echoes Hume's ironic remark that religious belief depends, not on reason, but on the miracle of faith. Believe the claims of theism and you'll believe anything, for it really would take a miracle for them to be true.

But what of those who do believe these claims? Do they believe what is false, or what is unintelligible? On the whole, Mackie deals with them as believers in what is false. Consider the way he talks of the belief in God as a person without a body:

It is sometimes doubted whether such descriptions can be literally meaningful. But there is really no problem about this. We know from our acquaintance with ourselves and other human beings, what a person is... Although all the persons we are acquainted with have bodies, there is no great difficulty in conceiving what it would be for there to be a person without a body; and while it is present one can act and produce results only by using one's limbs or one's speech organs, one can imagine having one's intentions fulfilled directly, without such physical means (page 1-2).

Most philosophers, I suspect, would say that if religion depends on this possibility it depends, not on what is false, but on what is unintelligible. When Mackie considers the effects of Hume and Kant's criticisms on Swinburne's restatement of the argument from design, however, he concludes that the objections "remain in force against Swinburne's restatement of it, and I surmise, against all possible reconstructions" (page 149, my italics). Here, he seems to be objecting to what is unintelligible, not merely false.

For the most part, Mackie characterizes proofs of the existence of God as failing in the battle of probabilities. They are not accused of incoherence. The same is true of Mackie's treatment of religious experience. His attacks attempt to prove the existence of God from the existence of religious experience. He also has problems in calling the experience religious, if this is taken to mean that religious ideas are constitutive of the experience. To call an experience "religious" in that sense, for Mackie, would be to adopt a hypothetical explanation of it which is false. The counter-hypotheses concerning these experiences are of the kind provided by Feuerbach, Freud and Engels. These writers made the

mistake of thinking the experiences could be explained in one way. What they should have said is that they are explicable in some such way. This section of Mackie's book is weak because he nowhere tries to meet objections about the lack of fit between the character of many religious experiences and the various accounts' reductionism of various kinds wants to impose on them. Mackie never asks himself whether we would always call the meaning of an experience an interpretation of it, or in what circumstances we would look for interpretations of experiences.

For Mackie, religious experience must be shown to make false claims because they involve theism. It is important to realize this, otherwise we may wonder why, when Mackie says, "since the early nineteenth century, and particularly through Kant's influence the traditional 'proofs' of theistic doctrines have been widely rejected or abandoned" (page 177) he spends 10 of his 14 chapters com-

Will and freedom

Will and Political Legitimacy: a critical explication of social contract theory in Hobbes, Locke, Rousseau, Kant and Hegel
by Patrick Riley
Harvard University Press, £17.50
ISBN 0 674 95316 9

"What more certain foundation on obligation among men have, than the free agreement of him who obligates himself?" asked Rousseau. The attraction of the concept of the social contract was never purely a matter of explaining how naturally free creatures could (and did) find themselves everywhere in chains. What it principally offered to those great seventeenth and eighteenth-century thinkers who found it attractive was a means of explaining how political power could be legitimate and how the free and responsible agency of individual men could be reconciled with their political obligations.

Modern contractarian thinking, predominantly American in provenance, has been directed less persistently towards the explication of political obligation than towards the analysis of social justice. This shift in focus plainly reflects the centrality of the ethics of economic distribution to modern politics. The contract serves to specify the rational interest of individuals; but in doing so it acts, for the most part, as little more than an expository convenience. By contrast, in the history of the social contract, as Rousseau's question suggests, the role of the contract itself was of more pressing significance. A truly free agent is most indubitably bound by his or her own free will and act.

The initial inspirations of Patrick Riley's book were fairly diverse; running, for example, from Michael Oakeshott to John Rawls. But its principal impetus plainly derives from a sense of these disparities between the scope and theoretical ambition of the works of the great contractarian philosophers of the seventeenth and eighteenth centuries and the comparatively modest aspirations of their widely admired modern imitators. What Riley wishes to do is to recapture the full power and reach of the original contractarian tradition and to reconstruct the achievements of this tradition in such a way that it can articulate modern Anglo-Saxon moral and political intuitions in a manner acceptable to modern Anglo-Saxon philosophical sensibilities. *Will and Political Legitimacy* is a preliminary exercise towards this endeavour, and Riley's own claims for the degree of its success are disarmingly modest.

It treats the writings of five great philosophers: Hobbes, Locke, Rousseau, Kant and Hegel, not all of whom offer clearly contractarian accounts of political legitimacy and at least one of whom notoriously shows little deference towards the idea of a free will. Riley himself is not an elegant or incisive writer. But he makes a sustained (and reasonably successful) attempt to understand the intentions of his five au-

thors. As a historical interpretation his treatment leaves some important lacunae, ignoring, for example, Hobbes's careful confrontation with the challenge of scepticism and failing to grasp, in the case of Locke, the close connection between his conviction of the demonstrability of ethics and his painstaking account of the epistemic status of moral categories. In addition, the somewhat anachronistic presumptions behind his approach prompt some mildly quaint observations about his victims; but they do not lead him seriously to distort the thinking of any of them.

The emphasis on will as the foundation of political legitimacy, a Christian legacy to the modern world, raises two interesting questions, on both of which Riley sheds some light. The first, which he takes as his major theme, is what precisely confers such a special dignity upon the free agency of individual human beings. The second, perhaps politically and culturally more pressing today, is how far it can be right to correlate political duty with the liberty of spontaneity. For understanding these issues none of Riley's philosophical found this blunt correlation attractive; and Hegel in fact expressed the demerits of the proposal as compellingly as anyone has ever done. (More recent attempts to press this line of thought, such as Robert Paul Wolff's *In Defense of Anarchism*, have served only to underline the cogency of Hegel's conclusions.) Yet unless political obligation can be correlated somehow with the liberty of spontaneity it is hard to see how it can possess for modern liberal individualists the peculiar certainty in foundation which Rousseau invokes.

Riley's frontal assault on the concept of the will itself is perhaps less successful. The contrast between voluntary and involuntary human action, complex and vague phenomenological distinction within human experience, both personal and social, its practical importance and existential urgency for all human beings is persistently obvious in everyday life, private as much as political. No doubt it gains handsomely in philosophical dignity if endowed with a coherent metaphysical theory of moral causality, as in the work of Kant. But it does not seem likely that its political strengths and weaknesses will be much altered by such supplementation.

Kant emerges in Riley's handling as the most adequate contractarian theorist, not because he actually does base political legitimacy upon the free choice of individuals; but because he offers a far more elaborate analysis and defence of the freedom of the will than any other thinker has ever done. To suppose that contractarian theory is most in need of reinforcement at this particular point is to presume that its most pressing weakness is the metaphysical parsimoniousness of the distinction between voluntary and involuntary human performances. But even so, Riley's own showing here is less than convincing. Above all, the implausibility of the attempt to specify a sufficient and convincingly directive schedule of political duty in terms of the free choices of not necessarily very tasteful or efficaciously socialized individuals.

Will and Political Legitimacy is a more successful contribution to the history of political theory than it is to modern political philosophy. But Riley is not simply in error in believing it to contribute to the latter genre also. The fact that it is able, out of its own resources, to do so testifies once more to the superiority in political philosophy of the early modern over the relatively recent.

conclusions need. Similarly, philosophers influenced by Wittgenstein are seen, not as challenging theism's characterization of belief, but as philosophers who want religion without belief.

Mackie complains, "To talk of 'God', Phillips claims, is not to refer to an individual, an object. But then what is it? ... Even if we understand faith as being primarily trust and reliance rather than factual belief it still needs as object; one cannot rely without relying on something" (page 226).

There is no objection to saying that God is the object of faith, but not all objects of faith are objects. To see how relying on God is different from other forms of reliance, and how analogies with these other forms cannot yield the meaning which reliance on God has, we would need to examine the contexts in which religious reliance has its home. In doing so, attention would have to be paid to concept-formation in religion. To do

this, however, would be to go radically against Mackie's conception of philosophical justification. It mentioned at the outset. We might well find that far from our initial non-rational active responses standing in need of rational justifications, such justifications will themselves be found to be grounded in responses which stand in need of no such justification. This would be as true of what Mackie calls "our beliefs in an external world" as it would be of religious faith.

But all this would be a far cry from the way in which Mackie philosophizes in this book. In so far as he is criticizing philosophers who arguing in the same way, try to show the reasonableness of religious belief, he succeeds in showing why their labours are in vain.

D. Z. Phillips

D. Z. Phillips is professor of philosophy at University College, Swansea.

John Dunn

John Dunn is a fellow of King's College, Cambridge.

In two camps

Paradigms, Thought, and Language
by Ivana Markova
Wiley, £15.95
ISBN 0 471 10196 6

Dr Markova is a psychologist with a background education in Czechoslovakia which plainly involved a good deal of philosophy. She is thus more sensitive than many psychologists to the more general philosophical issues which lie behind current psychological thinking. Her book starts from the belief that such thinking will implicitly involve some general presuppositions which ought to be made explicit. It is her claim that two opposed sets of such presuppositions, a Cartesian and a Hegelian set, guide radically different types of psychological inquiry.

Much of the book is concerned with an outline, often in some historical detail, of these philosophical presuppositions. To the professional psychologist, indeed, the work may seem more philosophy than psychology. Dr Markova, however, is anxious also to demonstrate in some detail the consequences of these presuppositions for actual research programmes, and the remainder of the book offers surveys of recent psychological inquiry carried out, not always consciously, under the influence of the two general schemes.

It is her view that most work in recent cognitive and behaviourist psychology leans on the Cartesian model, while the Hegelian alternative is nevertheless preferable. It is not that the Cartesian model is wholly inappropriate to psychology, for it may remain useful where research can treat human beings as if they were simply machines. But the Hegelian model does full justice to the human agent as a person, and, Dr Markova suggests, such a view is preferable on both intellectual and moral grounds.

Dr Markova is strongly influenced in her own thinking by the views of Thomas Kuhn. She implies that psychology itself is in a Kuhnian "crisis" in which the Cartesian and Hegelian paradigms are in conflict. What distinguishes the two paradigms is that in the Cartesian account the mind is seen as individualistic, static, passive, and analytical, while in the Hegelian the mind is viewed as social, dynamic, active, and hermeneutic. Philosophers will note with relief that the Cartesian model has nothing to do with the standard dualism which they have

spent so much energy refuting. Otherwise it would be at best puzzling that the Cartesian paradigm nevertheless underpins even behaviourist research. Instead the Cartesian picture represents a much more general signpost to certain methods of psychological investigation. The alternative Hegelian picture is less well represented in psychology, but is illustrated from the work of Heider, Rorty, and Rubenstein.

To an outsider it seems plausible to represent the human and social sciences as currently in a state of hesitant uncertainty. In psychology the earlier enthusiasm for a tough behaviourism is in conflict with the rise of so-called "cognitive science", one version of which is well exemplified in the work of Daniel Dennett. Dr Markova, however, seems to believe that these alternative views are fundamentally rather similar, and need to be contrasted with her Hegelian model. In a similar way, although one might wish to be sympathetic to a recent emphasis on human beings as persons in the work of such philosophers as D. W. Hamlyn and Rom Harré, she rejects such a view on the ground that it prevents psychology from being genuinely scientific.

A book of this kind, linking psychology with philosophy, will draw fire from both sides. Philosophers will want to raise queries about the definition of the competing paradigms. Not all philosophers in the Cartesian tradition regard the mind as passive. It remains puzzling that behaviourism should apparently rest on a view of the mind as individual rather than social. Despite the current fashion for Hegelian, hermeneutic and holistic ideas in the philosophy of social science these fashions still need clarification.

On the side of psychology it needs to be asked how strong the connection is between the philosophical presuppositions and the illustrated psychological research. I suspect that some of the Cartesian exemplars might not recognize their alleged presuppositions. But these questions are worth asking, and their answers might resolve some uncertainty in the fields of human and social science. It would be a pity if Dr Markova's book was not allowed to generate such a debate merely on the ground that it belongs neither simply to philosophy nor simply to psychology.

Graham Bird

Graham Bird is professor of philosophy at the University of Manchester.

Bibliography

Almost two thousand books and articles published to the end of 1978 are included. In Michael Laine's *Bibliography of Works on John Stuart Mill* (University of Toronto Press, £26.50). The bibliography is based on information collected for the *Mill News Letter* between 1965 and 1970 and compiled by Dudley L. Hecoff and John M. Robson. Three appendixes list light or artistic verse mentioning Mill, cartoons and portraits.

BOOKS

Miscue analysis

Language and Literacy: the selected writings of Kenneth S. Goodman edited and introduced by Frederick V. Gollisch
Volume one: Process, Theory, Research
Routledge & Kegan Paul, £15.50
ISBN 0 7100 0875 9
Volume two: Reading, Language and the Classroom Teacher
Routledge & Kegan Paul, £14.95
ISBN 0 7100 9005 6

When we read books or chapters or letters we do so on the whole, because we want to find out what these have to say. So it seems curious to cavil when a child fluffs this word or that if he manages none the less to get the sense of the passage absolutely right. This point has been made by Kenneth Goodman for some time now, and I take it to be his main point. Mistakes which preserve the text's meaning are not really mistakes at all, according to Goodman. In fact some time ago he decided to eschew the word "mistake" altogether and use "miscue" instead; hence his now widely used technique "miscue analysis".

Goodman argues that reading is a "psycholinguistic guessing game". Children, he claims, take naturally to using the meaning of a passage to work out what the next sentence or phrase means. Since meaning is what reading is about we should, if we follow his argument, encourage such guessing and avoid like the plague other strategies which concentrate on decoding single words or, worse still, sounds. "Miscues" seem to be Goodman's particular bugbear: it is a method which may lead, he admits, to some early successes but which is unnatural and in the end may produce poor readers because it distracts children from the main aim of reading, which is to arrive at the text's meaning. Reading tests, and particularly tests in which children have to read a series of single unconnected words, fare almost as badly at Goodman's hands: they too have nothing much to do with real reading.

It is a simple and attractive idea, and by the time one has finished with this very large collection it still seems simple but, I am sorry to say, a great deal less attractive. Repetition is the book's most serious problem. Never before have I read a book which makes the same points in much the same way so many times. There are 45 papers here by Goodman himself, and as far as I can see, they say much the same thing, often with exactly the same turn of phrase and the same examples. Even the titles reflect this tedious regurgitation. "Let's dump the upright model in English," and "Upright ain't right!" sound startlingly the same, and in fact their contents are startlingly the same.

Nor, I am afraid, is this the only reason why the reader's excitement soon wanes. Goodman's negative style is offputting and unconvincing. Straw men and women stalk these pages. The most respectable is the person who advocates "phonics", who demands that it is taught by rote methods, who knows nothing of language, and thinks it unimportant, and who, never thinks of linguistic units larger than the word. Such a person would indeed be all sorts of a monster, but where is he to be found? I suspect that Goodman is bawling from his own passion by contrasting it with the ideas of fellacious bunglers.

So what about the case itself? That Goodman's case is successful is made very clear early on in this book. Goodman himself suggests (see William James) that his theory has become "so important that its advocates claim that they themselves discovered it". Much of the book which he has received is deserved. It is to Goodman's credit that he, more than anyone else, encouraged research workers to listen to children reading prose, and to treat miscues as more than just irreparable losses. He was surely right,

too, when he argued that there is a positive side to children's dependence on context. But the theory has some difficulties, most of which centre around Goodman's pet hates. Take "phonics". Goodman insists that there is only one reading process, his reading process, but this seems unnecessarily limiting. Surely children are flexible enough to use more than one strategy at the same time when they are reading, and the kind of strategy which depends on phonological analysis and which is taught by "phonics" could be one of these. After all such phonological analysis need not be nearly as unnatural linguistically as Goodman implies. Very early on in their life children take to rhymes and alliteration, and these are activities which involve detailed phonological analysis of sounds within words. There is also a great deal of evidence that this sort of phonological analysis plays an extremely important part in the early stages of spelling and spelling, but writing and spelling receive very little attention in these two volumes.

Another serious difficulty is that Goodman's pleas for a psycholinguistic approach to reading lack meat. There is in the end remarkably little about linguistics or psycholinguistics in those pages. Chomsky's distinction between deep and surface structures crops up; so, very regularly, does the point that text involves grammar and meaning. But there is virtually nothing about the developments in the psycholinguistics which over the past ten years have made the subject so exciting and which are crucially relevant to the study of reading for meaning, such as case grammars and the concern with pragmatics and with problems like anaphoric reference and deixis.

The best parts of this book are the summaries of Goodman's approach written by Gollisch and by Cambridge, and a long and helpful appendix which sets out the details of miscue analysis. The rest is marked by Goodman's hectoring and arrogant style, and by a general lack of content. These volumes could be the most expensive miscue of them all.

P. E. Bryant

P. E. Bryant is Watts Professor of Psychology at the University of Oxford.

The printed word

Orthography and Word Recognition in Reading
by Leslie Henderson
Academic Press, £27.80
ISBN 0 12 30520 3

The Process of Reading: a cognitive analysis of fluent reading and learning to read
by D. C. Mitchell
Wiley, £16.50
ISBN 0 471 10199 0

In recent years a great deal of interest has been expressed in the processes underlying skilled reading. If cognitive psychologists have anything useful to say about processes of recognition of the printed word, and about the derivation of the meanings of sentences, then we might have expected, these two discussions, to present it. However, both tread very warily through the methodological jungle, and although cautious conclusions are always appreciated, neither of these authors seems prepared to resolve controversy. This might be because it is still too early for us to have firm conclusions about word recognition and reading, or it might be because the conservative footstep at these books are too firmly planted at the level of fine experimental detail.

Both books are directed towards those with an interest in applied research. Mitchell has made concessions to his reader which make it suitable for advanced undergraduates, and whereas it does contain some inconsistencies, it will probably be read by students. It is one of the few digestible texts in this important subject. Henderson's book, however, is something of an enigma. It is extremely detailed in its discussion

of a restricted set of topics, but does not get very far into many of the issues in reading research, and speculation is restrained. As many who are seen as the potential readership will have explored these issues in the journals, what is the purpose of his book? It is thorough without being selective, and therefore of greatest use to the new postgraduate student, for it provides a synopsis of recent research which will aid the early literature review.

The title of Henderson's book is an accurate statement of the contents, for it is not a book about reading so much as the relationships between different orthographies and word recognition procedures. The section on reading sentences, for instance, is lamentably brief, and appears as an afterthought to a discussion of the mental lexicon. There is very little on reading beyond word recognition, and nothing at all on the assimilation of meaning from text.

The first of three equally sized sections of the book deals with orthographic systems for representing language. It contains a misplaced chapter on speech perception, but is otherwise coherent, and contains the most useful reviews. The second section concerns more familiar evidence of phonological mediation in word recognition, using evidence from skilled readers, but also considering the syndrome known as acquired dyslexia. This is slightly surprising. In a recent review of a text on the psychological implications of this syndrome, Henderson concluded that inconsistencies observed between patients may indicate that "some or even all of the acquired dyslexic's reading performance may be mediated by strategies that are inventions peculiar to these patients". It seems strange then to find Henderson relying upon data of these "strategic inventions" in his own book.

The final section, on "visual word recognition" is not unduly dependent upon the earlier sections, and relates to much of the content of Mitchell's book.

Given Henderson's discussions of methodological procedures and the number of comments to suggest that conclusions cannot be reached about issues which are judged to merit extensive discussion, the book gives the impression that it was written too early. Rather than attempting to provide cohesive summaries when closure is apparently unobtainable, efforts should perhaps be devoted to the collection of conclusive evidence.

Mitchell's book is readable and coherent, but contains rather too many omissions and logical errors for it to be described as a satisfactory summary of the state of the art. He too has a tendency to avoid conclusions, and also issues in terms of dichotomies. Theories are "pitted against each other, rather than processes identified and cognitive activities described".

Starting with a chapter on the extraction of information from print, which includes a narrow review of the literature on eye-movements during reading, we are introduced to the importance of visual memory in the integration of information across fixations. This is a well-worked argument, and uses just the right amount of empirical detail without getting tied up with the methodological intricacies involved in the "masking" procedure. The chapters on word recognition and sentence comprehension contain traditional reviews, with a comparison of Morton's logogen model and Becker's verification model being the strongest feature here.

A view is presented, by both Mitchell and Henderson, of word recognition as a process with "automatic components", although Mitchell is both inconsistent in his view, and in error in his interpretation of some of the evidence. He concludes, that recognition is not automatic because skilled readers cannot respond without interference to an auditory stimulus at the same time as deciding whether or not a letter-string is a word. If word recognition had been automatic he argues, then the auditory task would not have suffered. But this neglects the possibility that it is the process of deciding about the word and executing the response which leads to interference. Recognition may be automatic without the post-recognition processes being so.

Other suspect conclusions come from the discussion of the influence of context during sentence processing



Haycart group, taken by H. W. Taunt in Oxfordshire in about 1900. From *Farms in England*: prehistoric to present by Peter Fowler, published next week by HMSO for the Royal Commission on Historical Monuments England, price £4.95.

(where the data from some experiments are presented in arbitrary preference to the data from others), and from the discussion of the influence of pictures during reading (where unpublished data collected by Mitchell's undergraduate students are given preference over established work in the refereed literature).

Mitchell finishes with a brave chapter on "learning to read", which attempts to place evidence from cognitive psychology into an applied setting. This is an admirable intention, and should generate a dialogue with educationists, but in this case the recommendations are rather brief and abrupt.

Reading is a cognitive skill ideally suited to investigation using the well-developed analytical tools available to the psychologist. When they are applied appropriately, we shall be in a position to provide educationists with descriptions of the mental activity of readers of differing ability, and teaching practice can only benefit. The only conclusion from these two attempts, however, is that the useful description is not yet available.

Geoffrey Underwood

Geoffrey Underwood is lecturer in psychology at the University of Nottingham.

Eternal vigilance

The Psychology of Vigilance
by D. R. Davies and R. Parasuraman
Academic Press, £15.80
ISBN 0 12 206180 2

Human experimental psychology badly needs good publicists. It is unfortunate that most people have little idea what experimental psychologists do, and that the common impression is that psychological research is either trite, or silly, or so abstract in conception that it can have no application.

Davies and Parasuraman's book provides an excellent argument to the contrary from forty years research on human vigilance.

By convention "vigilance" has come to refer to the maintenance of alertness over long periods of time, and to the ability to sustain selective attention for some types of events while ignoring others. Research on vigilance was initiated by an applied problem encountered by RAF coastal command during World War II. On long flights over the Bay of Biscay and the North Atlantic radar detections of German U-boats: set down occurred towards the end of observers' watches. Laboratory simulations of radar detection tasks by N. H. MacLeod showed that this was not an example of prescient synchronicity by the German Navy, but rather the result of a limitation common to all human beings who have to keep watch for false, irrelevant signals under monotonous conditions - even for periods as short as 30 minutes.

The military anxieties of the Cold War, and the concomitant development of enormous radar installations, led to considerable government investment in vigilance research during the 1950s - provoking the wry joke among psychologists that "the price

of grants is eternal vigilance". This military investment has now tapered off - largely because of the success of these earlier applied studies. It is interesting to trace the chronology of research in Davies and Parasuraman's comprehensive bibliography: of the many hundreds of reports published between 1953-59 they find that 72 are still substantive references. These reports were mostly based on military applications. The 215 reports cited from the period 1960-67 begin to resolve complex theoretical issues and to extend applications of work to a variety of industrial monitoring and process-control tasks, to the performance of anaesthetists during simulated surgical operations, to long-distance driving, to the television monitoring of motorways and public concourses, to aviation, to the control of nuclear power plants and to a great variety of other necessary tasks in which lapses of attention are hazardous. The authors of the papers reviewed may truly claim that the industrialized world is a safer place because of their work.

The next cycle of 192 studies cited for the period 1968-74 extend research to individual differences in vigilance, to the effects of loss of sleep, to the relation of alertness to diurnal changes in body-temperature and to changes in electroencephalogram and other electrophysiological indices. We come upon intriguing discoveries such as that people who are classified as "introverts" and "extroverts" in pencil and paper personality tests indeed have differences in basal arousal level and also have characteristically different diurnal body-temperature cycles. Introverts tend to warm up early in the morning and so in this early, but they also cool down earlier in the evening and tend to go to bed earlier. Extroverts are cool and sluggish early in the morning but warm up gradually and stay warm and lively later. Alertness varies with body temperature, and so with time of day, differently for the groups.

Publications cited from the period 1975-81 are fewer in number (126), a decline that seems to be due to reductions in research funding rather than to the loss of fruitful applications, or of theoretical impetus in an expanding field. The most recent papers develop models of human performance which help us to understand changes in alertness as children grow up or as adults grow old; to understand some of the attentional correlates of mental illness, of mental subnormality, of brain damage and the side-effects of drugs (for example, the "hangover" effects of barbiturates and other hypnotics). They point to useful collaborations between experimental psychologists, neurologists and physicians as well as to the fruitful continuance of more traditional collaborations with engineers.

Davies and Parasuraman's review is not calculated to win popular acknowledgement for this field. They cover the literature in a concise and unsensational way. Their book is a review for graduates planning research in this area or for experts who need a convenient reference source. It is too deep and detailed for use as a undergraduate text.

Patrick Rabbitt

Patrick Rabbitt is professor of psychology at the University of Durham.

BOOKS

Rules of the game

Winning the Games Scientists Play
by Carl J. Sindermann
Plenum Press, £10.05
ISBN 0 306 41075 3

Scientific research is a calling, a philosophy, a creative art - and also a career. It cannot be pursued in isolation. Scientists are taught the technical skills of research, but they get no formal guidance on the behaviour that will be expected of them outside the laboratory. Dr Sindermann's objective is to explore, with some reasonable good humour, balance, wit, skill and insight the complex subject of interpersonal relations in science. It is a worthy subject, but complex indeed.

In many respects, scientists live quite ordinary lives. Like everybody else, they have to "evaluate the roles of women and men", "cope with bureaucracy and bureaucrats", "participate in committee meetings", and generally strive to "move up, on and out" until they are "getting and using power". In the chapters on these topics there is little of interest. The author's sentiments are so true that he seems to imagine that scientists escape all the traumas of early adulthood, never read romantic novels, nor even understand what is going on when they watch *Dallas* on television. Surely they are not such dummies as that.

They do need to learn, however, about writing and editing scientific papers, speaking about their research in public, attending, chairing and organizing scientific meetings, getting professional recognition, exercising scholarly authority, and other characteristic social roles of the scientific life. Most of this advice is sensible and always enough, although at times as seems usual in manuals of personal behaviour - absurdly sententious. It is, I suppose, just conceivable that a starry-eyed graduate student might imagine that "world-class scientists" are "unformally astute, urbane, perceptive, interesting professionals... politically aware... diplomatic by instinct and training... sensitive to nuances of interpersonal relationships, and... often (my italics) superb scientists". Not even Polonius would have been so unctuous, in private, about the grant ones of his acquaintance.

It is quite true, as the author continually emphasizes, that the best way to succeed in science is to do "superb" research. It is still, in many respects, a career that is open to the talented, where sheer technical virtuosity is sought out and rewarded, and where the work itself can give immense personal satisfaction. But it does have its own peculiar "rules", which one ought to be aware of, even if one decides not to follow them. Some of these are merely practical precepts, such as not trying to cram too many ideas into a short lecture. Others are matters of etiquette, such as acknowledging the help of assistants and technicians in a published paper. Others, again, are deeply entrenched traditions, such as that the chairperson of a conference session is chosen for scientific eminence rather than competence at handling the business. Finally - and most difficult of all to obey in spirit - there are prescriptive norms, such as that all discovery claims should be factually honest and conceptually original in every detail.

The trouble is that these rules are mostly contrary to our own selfish instincts, and are not even consistent with one another. It is in the contradictions of social life that we most need advice. It is all very well to insist, for example, that the chairperson should cut speakers off when their allotted time is up. Dr Sindermann should tell us how he deals with the compulsive egotist who says "I'm just coming to my final point" and goes on for another quarter of an hour, without himself then seeming unforgivably rude. Again, it cannot be doubted that reviewing a manuscript is a difficult art, calling for competence, time, analytical ability,

diplomacy, firmness, and so on, but the practical professional problem is how much effort is worth devoting to this apparently thankless and often ineffectual task. By what criteria ought one then to decide whether a paper should be published, and is it a rule always to be gentle rather than savage in a referee's report, or simply a piece of worldly wisdom to curb one's contempt for shoddy work?

In spite of its title, with its echoes of Stephen Potter ("How to Win Games without Actually Cheating"), this book fails to convey the essential tension between personal motives and the collective good in all social interaction. The author recognizes that competition and controversy are normal in the scientific world, but does not seem to appreciate that the essence of the notion of "gamesmanship" is that there are techniques of exploiting this competitiveness for personal advantage. He is scornful of the more disreputable versions of this, which involve actual cheating, but does not arm his readers against the subtler ploys and counterploys which may be used on them, or which they may themselves be tempted to use. I would not wish to sound cynical, but my advice would be to read William Cooper's *The Struggles of Albert Woods* (1982) before putting oneself at the mercy of a PhD supervisor, or accepting any post of responsibility in the scientific profession.

John Ziman

John Ziman is visiting professor in the departments of social and economic studies and humanities at Imperial College, London.

Biology at university

From School to University: the biological sciences
by James Burckhill
Aberdeen University Press, £3.00
ISBN 0 08 028472 8

As this short book presents a case study of the transition problems encountered by biology students during their first year at 11 universities and colleges in Scotland, it should be of general interest to all those who teach in secondary and tertiary education and will of course be of special interest to teachers of biology.

No surprisingly, the study confirms, quite independently, many of the findings made by T. Cole and myself for English universities (The case for sixth form biology as a requirement for university entrance, *Journal of Biological Education*, 12, 267-274, 1978), but it has the added advantage that the author has canvassed opinions from secondary school teachers and has also assessed more extensively student performance during the first year at university. Furthermore, the book sheds light on the relationship between the "type" of biology teaching in secondary schools and the subsequent level of success in tertiary education.

The data presented by the author has been collected from four sources: secondary school teachers, lecturers at universities and colleges responsible for teaching first-year students, degree courses in a biological discipline, and the same students at the end of that first year. The reliability of opinion given by the study can be gauged by the large number of teachers and students involved and the high percentage returns of questionnaires in each case.

The study points to the difficulties that most secondary school teachers face in catering for sixth-form students with wide ranging abilities, interests and motivation, particularly when higher education makes more specialist demands for those students with a vocational interest in biology. Many of the difficulties encountered by students taking courses in pure and applied biology at colleges and universities arise because biology at GCE A level or CSE level is not an essential requirement. Indeed several of the biological schools and some departments of biology almost discourage

the study of biology at school by placing greater emphasis on the physical sciences and mathematics as the most suitable entry qualifications into their undergraduate courses.

The difficulty of pursuing this policy is that many able students never have an opportunity to take a real interest in biology at school and never really contemplate a biological or medical career. This attitude tends to relegate biology to a low status science subject; and this seems to be especially problematical in Scotland. Moreover, for those that do eventually come to medicine or biology from a physical science background, few first-year undergraduate courses make allowance for the lack of background in biology, but assume instead some knowledge and competence. As the author says, "the problems associated with transition are particularly troublesome in biological sciences, mainly because of the variety of qualification and previous experience of biology within a first year class."

The remedy for these problems must be the shared responsibility of both secondary and tertiary teachers. The key (as this and other studies show) lies in the way in which science is taught - namely greater emphasis on independent work and problem-solving both of a practical and theoretical nature, as well as knowing where to look for and retrieve relevant information. In this respect, biology is just as valuable an education as the physical sciences; because its vocabulary can be tricky, it is even more imperative that the study of biology is begun early. The fact that English students who enter Scottish universities with A level qualifications (usually including biology) fare better in the first year than their Scottish counterparts lends support to this view.

Any teacher of biology will find the information in this book thought provoking.

Michael Tribe

Michael Tribe is lecturer in biological sciences and education at the University of Sussex.

Soviet innovation

Industrial Innovation in the Soviet Union
edited by Ronald Amann and Julian Cooper
Yale University Press, £30.00
ISBN 0 300 02772 9

This massive study confirms the reputation of the Birmingham Centre for Russian and East European Studies as the leading centre for the study of the Soviet research and development and innovation system.

An earlier and equally impressive volume (*The Technological Level of Soviet Industry*, Yale, 1977) concentrated on the question of the "technology gap" between the USSR and the leading industrial countries of the OECD group and concluded that the gap was substantial and not diminishing. This volume takes up possible explanations of the differences between sectors of the Soviet economy, rather than inter-system comparisons with leading capitalist countries. But in fact, although it is not their main intention, they do make many interesting comparisons with industry outside the Soviet Union and these might have benefited from a more systematic treatment.

The first chapter (by Amann) and the last two chapters (by Hanson and Cooper) discuss general issues affecting the performance of the Soviet innovation system, while the other seven chapters discuss individual sectors or technologies - machine tools (Berry), group technology (Grayson), chemicals (Amann), management automation (Cave), process control instrumentation (Siamaszkio), defence (Holloway), intercontinental ballistic missiles and tanks (Holloway).

Although each chapter is of considerable interest, and an important contribution to understanding the overall performance of the Soviet system, the three more general chapters are

probably the most helpful for the non-specialist, especially the introductory chapter in which Amann draws together the main conclusions from the rest of the book. In the two final chapters Hanson discusses the experience of the Soviet Union as an importer of foreign technology and Cooper discusses the various attempts to reform the innovation system and their prospects of success. These more general chapters are very much needed, as the wealth of detail in some of the sector chapters sometimes makes it difficult to see the wood for the trees and the great variations between sectors make it quite difficult for the reader (and apparently sometimes for the editors too) to assess the overall performance of the system.

One of the difficulties for outside observers attempting to understand developments in a culture and social system of which they are not a part is that it is doubly difficult to rate the significance of a particular book or article in a journal, or report in a newspaper. Yet the written record is the main source of information. These difficulties must be the explanation for the use of 473 footnotes in the chapter on the chemical industry, and almost as many in several other chapters. The authors are scrupulously concerned to document the sources of every single statement in a way which would be unnecessary in a more familiar climate. In the preface they defend this conscientious but occasionally ponderous approach explicitly. Sometimes, however, they might risk rather more synthesis, analysis and summary treatment (and fewer footnotes) without loss of scholarship.

This is not to disparage the value of the individual sector studies. Each one has interesting observations and comments and covers ground which is almost unknown territory for most western economists and technologists. Repeatedly, throughout the book the separation of most R & D activities from enterprises and factories is emphasized as a negative feature of the Soviet innovation system, the adverse effects of which are overcome only within the defence sector. The relative success of the defence sector is explicable, on the one hand, by the tremendous concentration of technical effort on defence and space - estimated by Holloway at 50 per cent of the total R & D effort (rather than the 75-80 per cent often quoted in intelligence estimates) - and on the other hand, by the requirement of the centralized Soviet system for strong political initiative from the top to ensure successful innovative effort. This political "clout" is far more important than formal management systems or project evaluation techniques which have proliferated there, as in the West. The chapter on instrumentation states flatly that "the whole procedure is not really treated seriously in the Soviet Union, but is looked upon rather as a ritual which must be followed in order to have a given project authorized." Another author reports that project designers are able to manipulate calculations of economic effectiveness to conform with any required value, without infringing the official method.

The Soviet leadership has shown itself increasingly aware of these and other major shortcomings of their innovation system, but, as in this country, constant efforts at reform throughout the postwar period have concentrated on relatively minor administrative and bureaucratic reorganization, rather than a more drastic attempt to remedy the weaknesses. Through their conscientious, patient work the Birmingham team has made available a wealth of detailed knowledge, which would otherwise have remained inaccessible to most, if not all of us in the West. I suspect that it will also be of considerable interest and value to Soviet analysts.

There are many things to commend in this book: the line diagrams and photographs have been produced with great care, and the reference list is impressive, with 30 pages containing about 1,000 items. Quite apart from its value as an introductory text to many undergraduate courses in planetary science or Earth sciences and geology, this book would form a good jumping-off point for many postgraduates. My few criticisms would include the occasional rather shrill style of the text (perhaps inevitable when covering so much material) and the notable omissions from the chapter on solar system formation of some important contributions from UK scientists.

Christopher Freeman is Deputy Director of the Science Policy Research Unit at the University of Sussex.

A second edition of D. H. Kornhauser's *Japan: geographical background to urban industrial development* has been published in Longman's *The World's Landscapes* series at £5.95.

Lull in planetary missions

Introduction to Planetary Geology
by Billy P. Glass
Cambridge University Press, £18.00
ISBN 0 521 23579 0

While reviewing the *Cambridge Atlas of the Planets* in these pages (see *The Times*, 24 December, 1982), I commented on the need to utilize the present lull in deep-space planetary missions as a time to reflect on what has been learned about the solar system during the past 15 years and to synthesize and publicize this information in various forms suitable for both the general and specialized audience. The *Atlas* fulfilled this role well for many general readers; now, hard on its heels comes Billy Glass's excellent undergraduate textbook.

Although writing from the standpoint of a geologist, Glass has managed quite well to present a balanced picture of all the major aspects of planetary science, dealing with planetary atmospheres and the interiors of the gas giants as well as the surfaces and interiors of the silicate bodies of the inner solar system. Following a general introduction to the nature of the planets, the second chapter summarizes the many basic techniques that have been applied to the study of planets. These include Earth-based remote sensing spectroscopic and radar methods; radio, infrared, visual and ultraviolet measurements from fly-by and orbiting space probes; a wide range of *in situ* optical, chemical and geophysical measurements from spacecraft soft-landing on the Moon, Mars and Venus; and, of course, the analyses of the lunar samples returned from the Apollo missions.

Of particular interest is the third chapter, for here Glass attempts to present a summary of our understanding of the structure and evolution of the Earth, and the nature of the physical processes which take place on and within it, at the same level of complexity, and from the same external viewpoint, as those which apply to current studies of the other planets. This synopsis serves as a basis for the interplanetary comparisons which follow.

Most of the rest of the book follows the pattern one would expect. Separate sections deal with each of the inner planets and the Moon; with meteorites and extraterrestrial dust; impact craters; tectonics; and asteroids and comets. The references given in these chapters span the period up to about 1979, which is quite adequate for most purposes. More up-to-date is the coverage in chapter 11, dealing with the outer gas-giant planets and their satellites, which includes most of the recent information from the Voyager missions. The penultimate chapter deals specifically with the results of planetary comparisons, showing the extent to which our understanding of the evolution of planets can be improved by considering them together as a group rather than as individuals, and the final chapter summarizes theories relating to the origin of the solar system.

There are many things to commend in this book: the line diagrams and photographs have been produced with great care, and the reference list is impressive, with 30 pages containing about 1,000 items. Quite apart from its value as an introductory text to many undergraduate courses in planetary science or Earth sciences and geology, this book would form a good jumping-off point for many postgraduates. My few criticisms would include the occasional rather shrill style of the text (perhaps inevitable when covering so much material) and the notable omissions from the chapter on solar system formation of some important contributions from UK scientists.

Lionel Wilson

Lionel Wilson is head of the planetary sciences section of the department of environmental sciences at the University of Lancaster.

HUTCHINSON

- * 7 titles for the new TEC units
- * written and approved by the Technician Education Council

MICROELECTRONIC SYSTEMS LEVEL I
£4.95 paper 09 147191 5

MICROELECTRONIC SYSTEMS LEVEL II
£5.95 paper 09 148901 6 February 1983

MICROELECTRONIC SYSTEMS LEVEL III
£6.95 paper 09 147801 4

MICROPROCESSOR-BASED SYSTEMS LEVEL IV
£8.95 paper 09 148911 3 April 1983

MICROPROCESSOR-BASED SYSTEMS LEVEL V
£7.95 paper 09 147361 6

MICROPROCESSOR APPRECIATION LEVEL III
£4.95 paper 09 148821 3

MICROPROCESSOR PRINCIPLES LEVEL IV
£5.95 paper 09 148921 0

Inspection copies available from
Alicia Garstin, Hutchinson Education,
17-21 Conway Street, London W1P 8JD.
TECHNICIAN EDUCATION COUNCIL
in association with HUTCHINSON

'The Rise and Decline of Nations

Economic Growth, Stagnation, and Social Rigidities
Mancur Olson

The years since World War II have seen rapid shifts in the relative positions of different countries and regions. Leading political economist Mancur Olson here offers a new and compelling theory to explain these shifts. £12.25

'The Political Economy of Growth

edited by Dennis C. Mueller

The essays in this unusual volume centre largely on an introductory essay by Mancur Olson setting forth the thesis developed more fully in his book *The Rise and Decline of Nations*. Porthcoming £19.50

'The Financial Development of India, Japan, and the United States

A Trilateral Institutional, Statistical, and Analytic Comparison
Raymond W. Goldsmith

Goldsmith highlights the essential differences between the financial structures of India, Japan and compares them to that of the United States, regarded as the prototype in this field. £10.95

'Too Hot to Handle?

Social and Policy Issues in the Management of Radioactive Wastes
edited by Charles A. Walker, Leroy C. Gould, and Edward J. Woodhouse

Eminent specialists from a variety of fields present technological, public health, political, social, psychological, and ethical perspectives on waste management and offer alternatives for dealing with this crucial problem of nuclear safety. Cloth £16.00, Paper £4.95

'Industrial Innovation in the Soviet Union

edited by Ronald Amann and Julian Cooper

"Indispensable for anyone wanting to look in sharper focus at the performances of individual Soviet industries." - *The Guardian* £30.00

'The Japanese Company

Rodney C. Clark

An excellent analysis of the Japanese company - *The Wall Street Journal* Cloth £17.00, Paper £5.95

'Yale University Press

33 Bedford Square, London WC1B 3JP

THE AUDIO VISUAL LIBRARY OF COMPUTER EDUCATION

comprehensive introduction to the world of computers, our fifteen-part series explores all aspects from micro to mainframes. Available as videocassettes, Tape/Slides or Tape/Filmstrips. Send for your FREE catalogue now!

Information Productions, 9 Gloucester Crescent, London NW1 0JL 485 8882

24 TITLES ON STATISTICS & OPERATIONS RESEARCH

TECHNICIAN AND BUSINESS EDUCATION

Commerce meets the challenge ahead

Jim Deboo looks at training from the employer's point of view



point of their consumers. To this end, the joint CBI/colleges panel, which I have the privilege to chair, held two conferences - one on TEC and the other BEC - in February 1981 and February 1982 respectively, in association with the Further Education Staff College at Coombe Lodge.

Discussions in the months following the TEC conference resulted in over 30 recommendations to the TEC review of policy. All of these recommendations were aimed at helping TEC to adapt effectively to the increasing economic and industrial/commercial challenges of the 1980s.

Such a situation cannot continue. The key question is, therefore, how can supply and demand for technicians better be matched throughout the remainder of the 1980s in the light of the CBI's research and technology committee specified shortages of qualified technicians for design, development and production work as one major obstacle preventing industry and commerce from taking advantage of the newer technologies.

Such a situation cannot continue. The key question is, therefore, how can supply and demand for technicians better be matched throughout the remainder of the 1980s in the light of the CBI's research and technology committee specified shortages of qualified technicians for design, development and production work as one major obstacle preventing industry and commerce from taking advantage of the newer technologies.

Such a situation cannot continue. The key question is, therefore, how can supply and demand for technicians better be matched throughout the remainder of the 1980s in the light of the CBI's research and technology committee specified shortages of qualified technicians for design, development and production work as one major obstacle preventing industry and commerce from taking advantage of the newer technologies.

Such a situation cannot continue. The key question is, therefore, how can supply and demand for technicians better be matched throughout the remainder of the 1980s in the light of the CBI's research and technology committee specified shortages of qualified technicians for design, development and production work as one major obstacle preventing industry and commerce from taking advantage of the newer technologies.

Such a situation cannot continue. The key question is, therefore, how can supply and demand for technicians better be matched throughout the remainder of the 1980s in the light of the CBI's research and technology committee specified shortages of qualified technicians for design, development and production work as one major obstacle preventing industry and commerce from taking advantage of the newer technologies.

Such a situation cannot continue. The key question is, therefore, how can supply and demand for technicians better be matched throughout the remainder of the 1980s in the light of the CBI's research and technology committee specified shortages of qualified technicians for design, development and production work as one major obstacle preventing industry and commerce from taking advantage of the newer technologies.

Such a situation cannot continue. The key question is, therefore, how can supply and demand for technicians better be matched throughout the remainder of the 1980s in the light of the CBI's research and technology committee specified shortages of qualified technicians for design, development and production work as one major obstacle preventing industry and commerce from taking advantage of the newer technologies.

Such a situation cannot continue. The key question is, therefore, how can supply and demand for technicians better be matched throughout the remainder of the 1980s in the light of the CBI's research and technology committee specified shortages of qualified technicians for design, development and production work as one major obstacle preventing industry and commerce from taking advantage of the newer technologies.

Underlying all these recommendations to which CBI remains fully committed was the need to produce inputs into TEC's and BEC's activities from leading employers and their associations. Both conferences also made clear that there should be cross-fertilization of TEC and BEC courses by, for example, introduction of relevant BEC units in commercial and financial studies in appropriate TEC courses and TEC's involvement in the design of modules to develop technological awareness among BEC students.

Such overall interests culminated in the CBI's response to the proposed TEC/BEC merger. Essentially, CBI sees the merger, as in TEC and BEC, as an opportunity for everyone involved to meet the continuing need to involve more leading employers and their associations in the development of technician and business education and, thus, to maximize the benefits of relevant, up-to-date, high-quality and cost-effective technician and business education for the students concerned, industry and commerce and the nation.

CBI is confident that this opportunity will be seized in the interests of both long-established and emerging sectors of industry and commerce. The achievement of the other objectives of the proposed merger, such as sounder financial viability both for TEC and BEC and closer educational co-operation between them, will depend upon this.

To date, CBI has helped to initiate and is committed to the follow-up of two important developments.

One of these developments is the MSC's Open Tech which CBI helped to initiate as a partner in the MSC and is helping to progress through the national group which has now been set up to develop high priority learning schemes in general, such as familiarization of new technologies; applied economics; and areas such as computer operations and instrumentation engineering, where major skill shortages exist.

The other development is the related PICKUP initiative by the DES which is being steered nationally by the Further Education Unit's board of management on which I represent the CBI.

CBI is keenly interested in this initiative for two reasons. First, because of its intrinsic aim to stimulate leading employers and educationalists to work more productively together at regional and local levels specifically in the post-experience field. Second, because of the positive implications for the future activities of the DES in helping employers and the education service to work more closely together in other areas of key significance to the national economy, including technician and business education.

On a broader front, CBI is not present acting as a partner in the MSC in developing cost-effective and relevant initiatives aimed at widening training and re-training opportunities for adults. Central to such initiatives will be measures to complement moves by the key sectoral employer and training bodies, supported by further action, towards reforms in skill training, including apprenticeships, based on standards of training achievement and flexible ages of entry instead of time served.

CBI members look forward to working most effectively with schools and colleges, as well as further education and the MSC/DES, in developing and implementing this initiative by the Government. CBI has already strongly supported this initiative both publicly and at the MSC. Essentially, CBI supports the initiative because it opens up the prospect of a schools/further education/business axis on 14-18 education and training. At the very least, it should increase the opportunities which more able and well-motivated girl and boy school-leavers should have in the remainder of the 1980s and beyond to enter the key sector of technician and business education and training - in the national and their own interest.

The author is group training manager, Baker Perkins Holdings chairman of the joint CBI/colleges panel, a senior member of the CBI's education and training committee and its joint CBI/schools panel.

TECHNICIAN AND BUSINESS EDUCATION

Bringing the house down

David Moore relates how his college got in on the act



The theme "TEC and BEC at a local college" sounds something like a double act from the music halls. There are times over the last few years my colleagues and I have been driven to both laughter and tears by the effect of introducing Technician Education Council and Business Education Council courses. However, in spite of the somewhat hysterical tears and the occasional crocodile tears, there can be little doubt that the introduction of these new courses has had a major impact on the college and I suppose in a number of different categories.

The most important and obvious impact was on the teaching staff; the difficulties in the first place appear to outweigh any advantages. In particular there was the sheer pressure on staff time and, although our local education authority allowed a small amount of remission from teaching duties so that staff could plan the new courses and liaise with other colleges, the fact remains that by a very rough estimate, the workload in the two relevant departments must have been increased by 20 per cent.

Much of the 20 per cent extra work was, by definition, frustrating, not the least because so many activities were involved. It can be bad enough to spend two or three valuable hours in a meeting but it is even worse if you have to cover anything up to 150 miles to attend.

One of the other problems was, of course, that staff were not accustomed to the basic concept behind the TEC and the BEC and were certainly not used to designing their own courses, discussing these with colleagues, establishing methods of evaluation and so on. For most teachers at the time, in colleges like ours, I suspect that this was quite a new experience and at times quite unnerving. In a way these developments really called the bluff of many teachers who for years had been complaining that they should have more influence over their work; certainly they got that and in some cases rather more than they wanted.

All this sounds rather negative in terms of the teaching staff but, in fact, it turned out, in my opinion, to be one of the best staff development exercises anyone could have thought up. It became necessary to rethink course content, teaching methods, evaluation, both for the teacher and the students.

It also became necessary to articulate one's thoughts in a manner which would stand scrutiny from professional colleagues inside and outside one's own college. In many ways it is difficult to decide which is the worst challenge: to explain yourself to an outsider or to convince somebody you have been working with for perhaps 10 or 20 years.

As an additional bonus the new courses also made teacher training seem so much more relevant and, in some cases, much more urgent. It was certainly a decided advantage, as far as we were concerned, to have a very high proportion of staff who were not only qualified in their subject, but also, teacher trained and often with additional educational qualifications. At the very least, it meant that some of the jargon - like the BEC developed their own very specific - was almost expected and those who had undertaken teacher training were able to come to terms with it rather more quickly than many others.

One particular concept which should be emphasized is the way in which the TEC and the BEC have not only forced the teacher to acquire the new skills - I have been talking about, but also have added both to their autonomy and to their responsibility. In this way the dignity of the profession itself has been enhanced and that can't be a bad thing. The impact on staff has been

primary objective was to enhance the educational experience of the students. The TEC and the BEC have certainly widened the learning opportunities to the students in terms of subject choice. But, perhaps more importantly, the new methods both of teaching and examination have very definitely pointed to advantage for those groups of young people, not all of whom were successful in the traditional school examination system.

I am sure that other colleges can produce examples of students starting off on a BEC general course, without any O levels or CSEs, and ending up either taking the Higher Diploma or indeed, moving on to a traditional degree. This is not to suggest that the standards of the BEC and the TEC are any less rigorous or authentic than any other examination bodies, but merely that trouble has been taken to find ways in which some groups of young people can learn and develop more effectively. Of course the BEC and the TEC have the advantage of offering courses in subjects which, we hope, are always relevant but certainly appear so to the student, thus increasing motivation.

Talking about relevancy, there have been many discussions about whether the new TEC and BEC courses are more or less relevant than their predecessors. While it is difficult to make a firm judgment, backed up with incontrovertible evidence, there is a strong feeling that the courses have moved much more closely to what young people will need, not only in their immediate employment but in the future, as they progress through the career system.

We have also thought that, while continuous assessment and project work can produce many administrative difficulties for the college staff, particularly when students are taking exams or are absent for other reasons, there is no doubt that they tend to work much more steadily and therefore, I believe, much more effectively throughout the year. This is a great improvement on the old mad dash a couple of weeks before the exams, in order to scrape a pass.

I am not sure that the students actually enjoy the new system or, perhaps it would be better to say, appreciate it while they are going through it. But the kind of babble we hope to give them about stand them in good stead when they have to impose their own disciplines later in life.

One of the problems the students have had, of course, which also applies to the college, is the question of explaining the new qualifications to employers. It has not been too difficult with major companies whose training staff are very much involved in the TEC and the BEC, but local employers, particularly in small companies, have found it difficult to understand the need for a change and, in some cases, what the change was about.

The problem is compounded by the fact that many of the teaching staff in the early days were not at all sure themselves, first in terms of what the new courses were about, and then in terms of how to teach them.

effective compared to the more traditional qualifications they, and the local employers, had themselves earned in the past. There is also the fact that while a major national company can take a generous view of training for the national good, the average local firm does not always feel that it has got a part to play in training young people for the future at what appears to be its expense, as opposed to the company's. There is no doubt that the prospect of paying for something out of your own back pocket as opposed to a multi-national company's, does tend to concentrate the mind wonderfully on the effectiveness of one's expenditure.

As I have suggested at the beginning, the TEC and the BEC, apart from their influence on individual staff, students and employers, have also affected the management of colleges and, I suspect, local education authorities. As far as the college is concerned, we have had to take into account the additional pressures on teaching staff and, equally important, the additional pressures on ancillary staff and on the budget.

Apart from the cost of people's time and travelling, there has also been the production of incredible quantities of paper. This reminds me that my head of staff development recently said that, according to our personnel statistics the average member of staff was two thirds male, one third female, a non-smoker but a drinker, had a lower second, one fifth of a higher degree and used 3,000 sheets of duplicating paper per year on a machine which, according to the member of staff involved, never worked anyway!

It is interesting that local authorities should give remission for teaching staff in terms of course development but, perhaps not surprisingly, they don't appear to consider the impact on the budget or on clerks, typists, audio visual aids people, etc. It was obviously a benefit that so much work and rethinking had to be done, but the consequences were very often quite a severe strain on resources, which sometimes led to the need to change priorities in the college itself. All of which means that not only are the teachers given more responsibility and autonomy, but so are the colleges, with consequent implications for the need to be even more administratively sound than in the past.

Looking back, after all the early doubts and after much of the hard work has been done, we are bound to say that on balance the BEC and the TEC have had not only a significant but also a positive and beneficial influence on the further education service.

I am, however, glad to learn that there is to be an amalgamation of the two bodies as this will reduce, however marginally, the number of external agencies colleges are now having to negotiate with. Perhaps when this happens the final body will be powerful enough to make sure that both teachers and colleges have the money and time to implement the objectives and to continue the development of the courses.

The author is principal of Nelson and

TEC and BEC books from Nelson

Nelson's expanding BEC list includes:

Quantitative Methods in Business NEW
Graham Taylor and Chris Hawkins
This book is ideal for students following the BEC Higher Level. It covers Quantitative Methods, Business Planning and Decision Making. It aims to give business students the ability to analyse and interpret quantitative information as the basis for informed decision making.
0-17-741130-8 £7.95 net

Organisation Studies NEW
JWD Glover and WG Rushbrooke
Organisation Studies has been designed primarily for use on BEC Higher Level Business Studies courses and will also be of value to other students requiring an understanding of management theory and practice.
0-17-741128-0 £7.25 net

The Business Environment NEW
E Rick and F Neal
Written primarily for use on BEC Higher Level courses *The Business Environment* will also be of use to students requiring an appreciation of the political and economic environment of business.
Publication Date May 1983 0-17-741128-0 about £6.95

Nelson's TEC books include:
Structural Mechanics and Analysis Level IV/V WM Jenkins
This book provides a comprehensive treatment of structural mechanics and analysis for both TEC Levels IV and V, and for degree course students.
Paper 0-17-741081-2 £9.15 net Cased 0-17-741082 £18.30 net

Geotechnics Level IV AG Williams
This book covers the learning objectives of the Geotechnics Level IV unit and also contains a detailed resource which provides an ideal source of reference.
Paper 0-17-741081-7 £9.15 net Cased 0-17-741082-5 £17.75 net

Mathematics for Mechanical and Production Engineering Level IV Jack Morris
This book has been written specifically to cover the mathematics and statistics needed by students taking mechanical or production engineering courses leading to the Technician Education Council's Higher Certificate.
Paper 0-17-741071-X £7.00 net Cased 0-17-741072-8 £14.00 net

Environmental Science Level IV HA Tabor
This book covers the Environmental Science Level IV unit and is intended for the student taking technician in construction and building services.
Paper 0-17-741079-5 £8.70 net Cased 0-17-741080-0 £12.85 net

To obtain inspection copies or further information please write to:
The Promotions Department, THE FREEPOST, Thomas Nelson and Sons Ltd., Nelson House, Walton-on-Thames, Surrey KT22 4BR.

LONGMAN FOR FURTHER EDUCATION...

THE LONGMAN TECHNICIAN SERIES

- *Widely used in colleges throughout the UK
- *Clear and well illustrated
- *Concise and authoritative text
- *Competitively priced

NEW From this firmly established series...

- Thompson: Microprocessors and Control for TEC Levels 3 or 4 £4.95
- Also now available
- Bird and May: Technician mathematics Level 1 2nd edition £4.95
- Bird and May: Technician mathematics Level 2 2nd edition £4.95

THE LONGMAN BUSINESS EDUCATION SERIES

- Little: Communicating with people at work £4.95
- Pincott: World of work £4.50
- Livesey, Pople and Davies: The organisation in its environment Vol 1 £5.95
- Livesey, Pople and Davies: The organisation in its environment Vol 2 £4.95
- Bird and May: Business calculation £3.50
- Burton: People and communication £4.95

Coming soon.....
□ Cass: An outline of statistics Probably £4.50

SEND FOR THE NEW TECHNICAL AND BUSINESS, COMMERCE AND SECRETARIAL CATALOGUES FOR 1983 AVAILABLE FREE OF CHARGE FROM THE ADDRESS BELOW

Please tick the boxes for inspection copies of these books (UK lecturers only) and return the advertisement to David Barrett-Jolley, Longman Group Ltd., Longman House, Burnt Mill, Harlow, Essex CM20 2JE.

Longman

Historical, cultural and structural differences make it difficult to relate detailed aspects of one education or training system to the detail of another when making transnational comparisons. It is reasonable to look at systems as a whole. Clearly, the United Kingdom and west European countries have a great deal in common. They are all western technological democracies and the ones compared here are all in the European Community. We have helped to run two workshops of the European Forum for Educational Administrators which has 11 member countries. In them we examined common issues of leadership and training and the management of education. At a general level it was equally possible for centralized and common resource problems. However, the level of agreement disappears at the point when specific issues of curriculum and structure occur. For example, France, Germany and the United Kingdom, at roughly the same time

Continental comparisons

David Parkes and Russ Russell show that the British system is less coordinated than elsewhere in Europe

In the mid 1960s, created vocational, socially responsive, non-university higher education establishments. These institutions, the polytechnics, Fachhochschulen, and the Instituts Universitaires technologiques, have enough in common to allow cooperation and the development of joint courses but they have different functions within different structures.

Comparative analysis is useful, however, as the similarities and differences point up issues in one's own country; one can examine common trends in a broader context and perhaps even identify them earlier than they might appear in a single country; we are, after all, part of the European Community attempting to

develop common educational and training structures. Educational structures are also evolved within the history and culture of each country. They are part of complex interactions which are only too easy to stereotype: the Germans orderly and regulated; the French centralist and Napoleonic; the English diffuse and uncomprehensible. In this article we would like to examine structure and coordination and avoid the trap of cultural identity. We would like to advance the view that for education and training in particular, technician and business education, then the relationships among the parts of the system are more important than curriculum content and pedagogic method. In particular the British need to reflect on how the roles of central government, central agencies, regional and local government, industry and unions and the education system, are coordinated in France, Germany and Italy. We think that in these three countries content and method may appear conservative and old fashioned. Educational institutions in these three countries may appear to reflect outdated English models. Educational institutions elsewhere in Europe may appear to be rigid and controlled and are usually monotechnic. Innovation may appear to be lacking, flexibility difficult to discover and our sophisticated modes of assessment incomprehensible but however badly at the chalk face or on the workshop floor, the outcome appears to make a useful contribution to the health or at least economic health of their societies.

Let us start with a brief description of the German system. The Further Education Staff College, funded by the Department of Education and Science and supported by British Council and Central Bureau, has undertaken a series of studies of the German training system. Its secondary school system appears, from a UK perspective, to be conservative, almost split among our 1944 categories of secondary modern, technical and grammar school, a system which reflects a lower level of social mobility than in the UK (as does the French). What seems significant about the German system is that 85 per cent of those who leave German schools at the minimum school-leaving age gain apprenticeships within a dual system. This requires compulsory day release until the age of 18 in the 11 Lander and work experience from curricula laid down from central government. At the technician and post-apprentice business levels the usual route forward is from those who have finished craft apprenticeships and spent two years in industry. It is only then that they go on to technician level training; either a two-year full-time or a four year part-time route.

There is an important alternative which is the Meister level or master craftsman. Here, after apprenticeship or training and examinations, one emerges as a master craftsman only then capable of operating at a specialist level, as a supervisor, or as a trainer in schools or in industry. In Germany the master craftsman level is very much the hub of the training and industrial systems. It is traditional, (one can trace it back to the medieval guild system), it is effective both in terms of operation and in terms of social status, and it is much

among the various competing and conflicting interests in the system. The English do not have such coordination. They have semi-autonomous institutions with shallow freedoms over curricula, method and resources. They have many different local authorities warring with central government. They have a wide variety of examining and validating bodies established by central government but without legal authority. Germany is an example of a decentralized federal country creating an effective training programme which appears, at least at a distance, to be more successful than ours.

The French have a philosophy which is apparently centralist, and clearly Cartesian. It has a legislative structure which creates the necessity for the state rather than industry or the private sector to control education and training. The apprenticeship structure may begin in the formal school system with alternation between work and school. Apprenticeship itself, with industrial experience, is based either in private or state training centres and these are controlled regionally from centrally prescribed regulations and standards; monitoring and examining is done through chambers of commerce or higher. It is undertaken through technical grammar schools or sub-university institutions. As in the UK technician education and training has parallel alternative routes to craft.

Visitors are inclined to make the point that the system is rigid, the hierarchy is tight, the system is inflexible and that innovation in content and method is not at a premium. Nevertheless the training structure appears to make a more substantial contribution to French industry than does the British. Where the German thrust is in the dual system and through apprenticeship and extra training for some, perhaps the French thrust is through continuing training; the necessity is for all firms to update all their workers regularly - a requirement backed up by legislation and taxation. As with the German system, pedagogy, content and assessment do not impress UK visiting experts. But, the relationship among the various parts of the system is coherent and compelling. The outcome seems to make for better economic performance.



Comparison between the UK and Italy is more telling since Italy has a non-working version of the Napoleonic system. The school leaving age is 14 and the Italians have a dual structure of craft schools and technician schools (monotechnic) where a two-year plus full-time combination of cycles gives three-year technical and business training to a larger percentage of 16 to 19-year olds than is the case in the UK. When in Italy, we visited separately business, graphics, engineering and computing institutions turning out technician level students at roughly BBC National and TEC Certificate levels. However, in Italy as in the UK, the relationship among the parts is relatively uncoordinated. Central government lays down the curricula for the technical institutes and they appear very little relationship of a direct kind with industry and commerce. Regions control craft level institutes or may fund private institutions fulfilling the same task. Politically, relationships may be leavoured to refer to the regulations, makes them appear to conform to the British stereotype of German culture. In fact, on being pressed, their real answer is as follows: "In framing the regulations there has to be political agreement among central government, the Lander, employers, and what eventually, outcomes will be. Very often, these are imprecise but there is sufficient measure of agreement to move forward to a detailed curriculum and for everybody to be pointing in a similar direction. Structure and content are agreed by very complex mechanisms - but - having been agreed and the movement forward having occurred it seems pointless to go beyond asking local industry and commerce to test standards of particular students. What point do elaborate comparison or testing serve?"

The significance of this of coordination can be seen from the issues which surround examinations. When in Germany, visitors from the UK often ask how the Germans compare standards among Lander and between years? The Germans do not appear to understand the question and their general response, which is to refer to the regulations, makes them appear to conform to the British stereotype of German culture. In fact, on being pressed, their real answer is as follows: "In framing the regulations there has to be political agreement among central government, the Lander, employers, and what eventually, outcomes will be. Very often, these are imprecise but there is sufficient measure of agreement to move forward to a detailed curriculum and for everybody to be pointing in a similar direction. Structure and content are agreed by very complex mechanisms - but - having been agreed and the movement forward having occurred it seems pointless to go beyond asking local industry and commerce to test standards of particular students. What point do elaborate comparison or testing serve?"

The Germans have a front-loading system which creates coordination

Equipping the young for the real world

David Young outlines the Manpower Services Commission's latest training initiatives



And of course there is the new initiative designed to work with the schools system. Announced by the Prime Minister only two months ago it is known at present by the unwieldy title of the New Training and Vocational Education Initiative. Its first aim is to test methods of organizing and managing the education of young people. It is designed to help them to be attracted to seek skills and qualifications which will be of direct value to them at work; they are better equipped to enter the world of employment; they acquire a more direct appreciation of the practical value and application of the qualifications towards which they are working; there is close collaboration between I.E.s (and thus the schools) and local commerce and industry.

There is much to be done before the projects are identified and become a reality. The commission has been asked to seek to ensure that as many as possible of these begin this autumn. This is an ambitious target for all those involved and especially

Local education authorities are crucial to the success of the initiative. They will be developing the projects and managing them.

the local education authorities concerned. But we are not starting completely cold. If we were we could not hope to achieve this target.

Many I.E.s have been not only thinking about the possibilities in the field of technical and vocational education for some time but making considerable progress. A sign of this interest is that nearly two thirds of them (64 at the last count) have given us preliminary indications of interest in the new initiative.

We have started by setting up a national steering group. The members of the group are from local authorities, education and industry and they will be advising the commission on how to establish the scheme as a whole.

The group has already met and will be meeting a number of times in the next few weeks. Its initial major task is to establish criteria and guidelines for the use of I.E.s who intend to submit formal proposals and we hope that these will be ready at the end of the month. These will be published and interested I.E.s will be asked to respond by early March.

The author is chairman of the Manpower Services Commission.

Basil Blackwell

Economics of Modern Business

W. Duncan Reekie and D. E. Allen

In this highly original textbook, W. Duncan Reekie and D. E. Allen examine major management issues in a sensible and entertaining fashion. A special feature of the book is its successful integration of introductory financial analysis with microeconomic theory. There are extensive sections on financial markets, distribution channels, industrial relations and government policies. It will be a core text for first-year undergraduates, as well as CMAA, BEC and ACCA courses. (May) 448 pages, hardback about £17.50 (0 631 13115 9) paperback about £8.50 (0 631 13116 7)

Industrial Relations in Britain

Edited by George Sayers Bain

The most comprehensive introduction ever to British industrial relations, this textbook covers trade unions, management, collective bargaining, industrial conflict, the labour market, and labour law and state intervention in industrial relations. (May) 520 pages, hardback about £20.00 (0 631 13138 8) paperback about £9.95 (0 631 13295 3)

Business Economics

Third Edition

Edited by James Bates and J. R. Parkinson

A completely reorganized and rewritten edition of this highly regarded introduction to business economics. Designed for students with no previous background in either business studies or economics, the book shows the relevance of basic economic principles to decision-making in the firm. 336 pages, hardback £16.00 (0 631 13146 9) paperback £7.50 (0 631 13147 7)

Managing with Micros

Management Uses of Microcomputers

Colin Lewis

In this completely non-technical guide, Colin Lewis shows what microcomputers can do. Using real-world examples, he introduces the novice to basic computer operations. There are clearly-written practical chapters on data management and information retrieval, as well as accounting systems. Colin Lewis describes the industry in general and software and hardware packages in detail. 208 pages, £9.50 (0 631 13136 1)

Basil Blackwell Publisher, 108 Cowley Road, Oxford OX4 1JF

Audio-visual training packages for office skills

Duplicating: contains instructor's manual, 30 colour slides, 19 OHP transparencies, 16 master cards for handout and exercise material. ISBN 0-2-102844-2 £38

Filing: contains instructor's manual, 30 colour slides, 28 OHP transparencies, 36 master cards for handout and exercise material. ISBN 0-2-102845-0 £48

Telephone techniques: contains instructor's manual, sound/slides presentation (35 colour slides and cassette), 17 OHP transparencies, sound cassette with exercises, 12 master cards for handout and exercise material. ISBN 0-2-102846-9 £48

Intended for use by instructors who have had either teacher training and some office experience or good office experience but little teaching experience. Extensive guidance on teaching techniques on a step-by-step basis is given. Senior instructors may find it interesting to compare these with their own teaching methods and materials.

The layout of a business letter: contains instructor's guide, trainee's guide with exercise material, text of the sound/slides presentation, 58 colour slides, sound cassette. ISBN 0-2-102843-4 £38

This package has been designed for use by all types and levels of trainees, ranging from beginners who have just attained keyboard mastery to experienced typists who may wish to update their display style, especially women who want to return to office employment after some years of absence.

INTERNATIONAL LABOUR OFFICE

London Branch Office
96/98 Marsham Street
London SW1P 4LY
Tel: 01-828 8401



THE SCOTTISH CENTRAL FILM LIBRARY

UK Distributors of film and video for Higher and Further Education.

Sole Distributors of Higher Education Film and Video Library, Royal Anthropological Institute Films, French Scientific Film Library, Unilever Films.

For further information contact:

The Scottish Central Film Library
Downhill
74 Victoria Crescent Road
Glasgow G12 9JN
Tel. 041-334 9314

A division of SCET
Prestel Page 445

TUTORS

If you would be interested in tutoring students by correspondence, or writing and revising home study courses, please apply for further details and application form to:

The Senior Tutor
The Rapid Results College
Tuition House
London SW18 4DS

The College offers a wide range of GCSE, business and technical subjects. You must be professionally qualified in the subjects you can offer and have relevant practical experience in business. We will provide guidance in the techniques of correspondence tuition. We are looking for additional tutors in a number of disciplines: in particular the following: Auditing, Building Society Practice, Commercial Law, English Legal Systems, Entrepreneurship, Trust Law & Accounts, Financial Management, Industrial Law, Public Sector Accounting, Taxation, Stock Exchange.

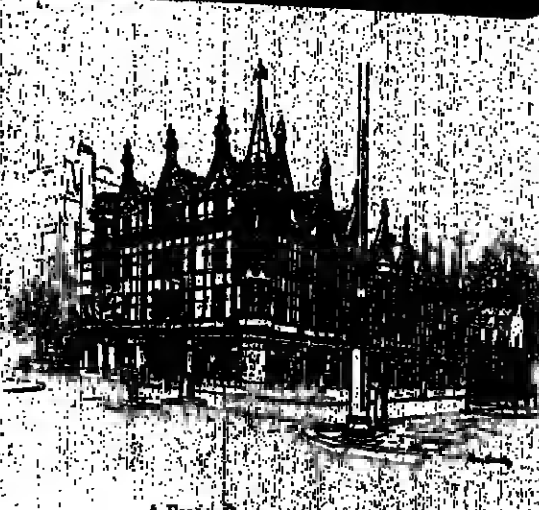


Specialists in
Correspondence Education
for over 50 years.

DILLON'S UNIVERSITY BOOKSHOP

101-103 STRATFORD LONDON WC1A 7TB (01-476 577) (01-476 578)

Dillon's is a leading book supplier for TEC and BEC courses; both within the United Kingdom and to overseas markets. We can supply either from our large stock of over 150,000 titles in all subject areas, or obtain any book to order. Our extensively revised catalogue of over five hundred books recommended for TEC programmes will be available shortly, while a listing of appropriate BEC titles is in preparation. For further information, and inclusion on our mailing list, please write to Chite Brickwood, Marketing Manager, with details of your requirements and subject of interest.



A Pinter Company

Universities continued

UNIVERSITY OF ZIMBABWE

Applications are invited for the following posts:

PROFESSOR OF PHARMACY:
DEPARTMENT OF PHARMACY

Applicants must have relevant qualifications for teaching students for the degree of Bachelor of Pharmacy with Honours.

PROFESSOR OF MECHANICAL ENGINEERING:
DEPARTMENT OF MECHANICAL ENGINEERING

The successful applicant must have a first degree and higher degree in Mechanical Engineering with extensive research, teaching and industrial association. The appointee will be required to take on a major role in the development of undergraduate and postgraduate work within the Department and to pursue research in his/her area of particular interest. Consultancy is encouraged.

PROFESSOR OF ECONOMIC HISTORY:
DEPARTMENT OF HISTORY

Prospective candidates should be in a position to teach the Economic History of Western Europe, the Americas, the underdeveloped world and communist economies. The ability to teach wartime economy and technology will be an added advantage.

LECTURESHIP/SENIOR LECTURESHIP IN DRAMA:
DEPARTMENT OF ENGLISH

This is a new post in the Faculty of Arts intended: (i) to strengthen existing courses in Drama in the African languages, Classics, English and Modern Languages Departments and (ii) to promote University theatre on end of the campus. Applicants should have a training in drama particularly in the practical aspects of management, production and acting, and have experience in designing and running drama courses.

LECTURESHIP/SENIOR LECTURESHIP:
DEPARTMENT OF OBSTETRICS AND Gynaecology

Applicants must hold the MRCOG or equivalent higher qualification. The appointee will be expected to engage in clinical work and take part in teaching and research.

LECTURESHIP/SENIOR LECTURESHIP:
DEPARTMENT OF PHYSIOLOGY

Applicants must hold a medical degree and/or a Ph.D. (D.Phil.) degree in human (mammalian) Physiology, and have postdoctoral training and research in one of the following disciplines: (i) endocrinology; (ii) neurophysiology; (iii) cardiovascular/respiratory physiology.

LECTURESHIP/SENIOR LECTURESHIP:
DEPARTMENT OF ACCOUNTANCY (5 posts)

The successful applicants will be required to teach in the following fields: Advanced Financial Accounting (2); Management Accounting (1); Data Processing (1); Auditing (1).

Applicants must have a degree with a minimum of a Master's degree, plus a suitable professional qualification. Candidates must be qualified in any one or more of the following subjects: Advanced Financial Accounting, Data Processing, Auditing and Management Accounting.

LECTURESHIP/SENIOR LECTURESHIP:
DEPARTMENT OF POLITICAL AND ADMINISTRATIVE STUDIES (2 posts)

(a) Applicants must have at least an MA degree in Public Administration or equivalent experience. Candidates must have competence in theories and practice of public administration in both developed and developing countries.

(b) Emphasis in Public Administration, but with competence in other areas of political science.

LECTURESHIP/SENIOR LECTURESHIP:
COMMUNITY MEDICINE FIELD PROJECT: FACULTY OF MEDICINE

Applicants must be medically qualified and should have had wide experience of general medical practice, preferably with experience in a rural area working with people in a developing country. The successful applicant would be based in the Chiwero Communal Land about 100 kilometres north of Harare. Excellent accommodation is provided.

SALARY SCALE	
(Non-Medical)	
Lecturer Grade II:	Z\$8,018 x 518 - 9,684 x 552 - \$13,428
Lecturer Grade I:	Z\$13,880 x 580 x 388 - \$15,664
Senior Lecturer:	Z\$15,000 x 480 - \$18,840
Professor:	Z\$19,452 x 612 - 20,678 x 840 - \$23,198
(Medical)	
Assistant Lecturer:	Z\$11,864 x 432 - \$13,392
Lecturer Grade II:	Z\$14,888 x 432 - \$16,400 x 488 - \$15,588 x 480 - \$17,936
Lecturer Grade I:	Z\$17,988 x 480 - \$19,908
Senior Lecturer:	Z\$20,100 x 600 - 22,800 x 804 - \$23,044
Professor:	Z\$24,000 x 824 - \$28,820

CONDITIONS OF SERVICE: Both permanent and short-term contracts are offered. Persons who are not Zimbabwean citizens may be appointed on a short-term contract basis with an initial contract period of two years. Short-term contracts may, in exceptional cases, be extended.

Six copies of Applications giving full personal particulars (including full name, place and date of birth, etc.), qualifications, employment and experience, present salary, date of availability, telephone number and names and addresses of three referees should be addressed to the Director, Appointments & Personnel, University of Zimbabwe, PO Box 167, Mount Pleasant, Harare, Zimbabwe (Telex: 4-152 ZW), from whom further particulars are available.

Overseas applicants should send an additional copy of their application to the Association of Commonwealth Universities, (Apsu), 39 Gordon Square, London WC1H 0PF, from whom further particulars also available.

Closing date for receipt of applications is 14 February 1983.

The University of Adelaide
Faculty of Law
Senior Tutor
in Music
(Piano/Forte)
(Tenureable)

Applicants should be outstanding performers and have proven teaching skills. The successful candidate will be responsible for the teaching of piano/forte in the Faculty of Law.

The successful applicant will have the opportunity to perform at the University and other concerts.

University of Hong Kong
Lectureships in Management

Applications are invited for two posts of Lecturer in Management Studies in the Department of Accounting and Finance, Business Administration, or Marketing.

Applicants should possess a degree in Accounting, Finance, Business Administration, or Marketing, and have relevant experience in teaching and research.

Annual salary (senior) will be within the range of \$20,373 to \$25,373 per annum, plus 15% superannuation.

At current rates, salaries will not exceed \$25,373 per annum. The successful candidate will be expected to engage in teaching and research.

University of Hong Kong
Senior Lectureships in Law

Applications are invited for posts of Senior Lecturer in Law in the Faculty of Law.

Applicants should possess a degree in Law and have relevant experience in teaching and research.

Annual salaries (senior) will be within the range of \$20,373 to \$25,373 per annum, plus 15% superannuation.

At current rates, salaries will not exceed \$25,373 per annum. The successful candidate will be expected to engage in teaching and research.

Further particulars and applications may be obtained from the Director, Appointments & Personnel, University of Hong Kong, PO Box 155, Hong Kong.

Closing date for receipt of applications is 14 February 1983.

The University of Leeds
Department of Computer Studies
Computing Assistant

Applications are invited for a post of Computing Assistant in the Department of Computer Studies.

Applicants should possess a degree in Computer Science or a related discipline, and have relevant experience in teaching and research.

Annual salary will be within the range of \$20,373 to \$25,373 per annum, plus 15% superannuation.

At current rates, salaries will not exceed \$25,373 per annum. The successful candidate will be expected to engage in teaching and research.

Further particulars and applications may be obtained from the Director, Appointments & Personnel, University of Leeds, PO Box 136, Leeds LS2 9JT.

Closing date for receipt of applications is 14 February 1983.

Brunel University
Department of Law
Faculty of Social Sciences
Applications are invited for a Lectureship in Law.

Applicants should possess a degree in Law and have relevant experience in teaching and research.

Annual salary will be within the range of \$20,373 to \$25,373 per annum, plus 15% superannuation.

University of Hong Kong
Lectureships in Management

Applications are invited for two posts of Lecturer in Management Studies in the Department of Accounting and Finance, Business Administration, or Marketing.

Applicants should possess a degree in Accounting, Finance, Business Administration, or Marketing, and have relevant experience in teaching and research.

Annual salary (senior) will be within the range of \$20,373 to \$25,373 per annum, plus 15% superannuation.

At current rates, salaries will not exceed \$25,373 per annum. The successful candidate will be expected to engage in teaching and research.

University of Hong Kong
Senior Lectureships in Law

Applications are invited for posts of Senior Lecturer in Law in the Faculty of Law.

Applicants should possess a degree in Law and have relevant experience in teaching and research.

Annual salaries (senior) will be within the range of \$20,373 to \$25,373 per annum, plus 15% superannuation.

At current rates, salaries will not exceed \$25,373 per annum. The successful candidate will be expected to engage in teaching and research.

Further particulars and applications may be obtained from the Director, Appointments & Personnel, University of Hong Kong, PO Box 155, Hong Kong.

Closing date for receipt of applications is 14 February 1983.

The University of Leeds
Department of Computer Studies
Computing Assistant

Applications are invited for a post of Computing Assistant in the Department of Computer Studies.

Applicants should possess a degree in Computer Science or a related discipline, and have relevant experience in teaching and research.

Annual salary will be within the range of \$20,373 to \$25,373 per annum, plus 15% superannuation.

At current rates, salaries will not exceed \$25,373 per annum. The successful candidate will be expected to engage in teaching and research.

Further particulars and applications may be obtained from the Director, Appointments & Personnel, University of Leeds, PO Box 136, Leeds LS2 9JT.

Closing date for receipt of applications is 14 February 1983.

The University of Aston
in Birmingham
Lectureship
(Re-education)
Strategic Management/SM-ALL BUSINESS MANAGEMENT

Applicants should possess a degree in Strategic Management or a related discipline, and have relevant experience in teaching and research.

Annual salary will be within the range of \$20,373 to \$25,373 per annum, plus 15% superannuation.

University of Hong Kong
Lectureships in Management

Applications are invited for two posts of Lecturer in Management Studies in the Department of Accounting and Finance, Business Administration, or Marketing.

Applicants should possess a degree in Accounting, Finance, Business Administration, or Marketing, and have relevant experience in teaching and research.

Annual salary (senior) will be within the range of \$20,373 to \$25,373 per annum, plus 15% superannuation.

At current rates, salaries will not exceed \$25,373 per annum. The successful candidate will be expected to engage in teaching and research.

University of Hong Kong
Senior Lectureships in Law

Applications are invited for posts of Senior Lecturer in Law in the Faculty of Law.

Applicants should possess a degree in Law and have relevant experience in teaching and research.

Annual salaries (senior) will be within the range of \$20,373 to \$25,373 per annum, plus 15% superannuation.

At current rates, salaries will not exceed \$25,373 per annum. The successful candidate will be expected to engage in teaching and research.

Further particulars and applications may be obtained from the Director, Appointments & Personnel, University of Hong Kong, PO Box 155, Hong Kong.

Closing date for receipt of applications is 14 February 1983.

The University of Leeds
Department of Computer Studies
Computing Assistant

Applications are invited for a post of Computing Assistant in the Department of Computer Studies.

Applicants should possess a degree in Computer Science or a related discipline, and have relevant experience in teaching and research.

Annual salary will be within the range of \$20,373 to \$25,373 per annum, plus 15% superannuation.

At current rates, salaries will not exceed \$25,373 per annum. The successful candidate will be expected to engage in teaching and research.

Further particulars and applications may be obtained from the Director, Appointments & Personnel, University of Leeds, PO Box 136, Leeds LS2 9JT.

Closing date for receipt of applications is 14 February 1983.

University of Papua New Guinea
Lectureship in the Department of Political and Administrative Studies

Applicants should possess a degree in Political Science or a related discipline, and have relevant experience in teaching and research.

Annual salary will be within the range of \$20,373 to \$25,373 per annum, plus 15% superannuation.

University of Hong Kong
Lectureships in Management

Applications are invited for two posts of Lecturer in Management Studies in the Department of Accounting and Finance, Business Administration, or Marketing.

Applicants should possess a degree in Accounting, Finance, Business Administration, or Marketing, and have relevant experience in teaching and research.

Annual salary (senior) will be within the range of \$20,373 to \$25,373 per annum, plus 15% superannuation.

At current rates, salaries will not exceed \$25,373 per annum. The successful candidate will be expected to engage in teaching and research.

University of Hong Kong
Senior Lectureships in Law

Applications are invited for posts of Senior Lecturer in Law in the Faculty of Law.

Applicants should possess a degree in Law and have relevant experience in teaching and research.

Annual salaries (senior) will be within the range of \$20,373 to \$25,373 per annum, plus 15% superannuation.

At current rates, salaries will not exceed \$25,373 per annum. The successful candidate will be expected to engage in teaching and research.

Further particulars and applications may be obtained from the Director, Appointments & Personnel, University of Hong Kong, PO Box 155, Hong Kong.

Closing date for receipt of applications is 14 February 1983.

The University of Leeds
Department of Computer Studies
Computing Assistant

Applications are invited for a post of Computing Assistant in the Department of Computer Studies.

Applicants should possess a degree in Computer Science or a related discipline, and have relevant experience in teaching and research.

Annual salary will be within the range of \$20,373 to \$25,373 per annum, plus 15% superannuation.

At current rates, salaries will not exceed \$25,373 per annum. The successful candidate will be expected to engage in teaching and research.

Further particulars and applications may be obtained from the Director, Appointments & Personnel, University of Leeds, PO Box 136, Leeds LS2 9JT.

Closing date for receipt of applications is 14 February 1983.

Universities continued

University of Papua New Guinea
Lectureship in the Department of Pathology

Applicants should possess a degree in Pathology and have relevant experience in teaching and research.

Annual salary will be within the range of \$20,373 to \$25,373 per annum, plus 15% superannuation.

At current rates, salaries will not exceed \$25,373 per annum. The successful candidate will be expected to engage in teaching and research.

Further particulars and applications may be obtained from the Director, Appointments & Personnel, University of Papua New Guinea, PO Box 111, Port Moresby.

Closing date for receipt of applications is 14 February 1983.

University of Hong Kong
Lectureships in Management

Applications are invited for two posts of Lecturer in Management Studies in the Department of Accounting and Finance, Business Administration, or Marketing.

Applicants should possess a degree in Accounting, Finance, Business Administration, or Marketing, and have relevant experience in teaching and research.

Annual salary (senior) will be within the range of \$20,373 to \$25,373 per annum, plus 15% superannuation.

At current rates, salaries will not exceed \$25,373 per annum. The successful candidate will be expected to engage in teaching and research.

Further particulars and applications may be obtained from the Director, Appointments & Personnel, University of Hong Kong, PO Box 155, Hong Kong.

Closing date for receipt of applications is 14 February 1983.

The University of Leeds
Department of Computer Studies
Computing Assistant

Applications are invited for a post of Computing Assistant in the Department of Computer Studies.

Applicants should possess a degree in Computer Science or a related discipline, and have relevant experience in teaching and research.

Annual salary will be within the range of \$20,373 to \$25,373 per annum, plus 15% superannuation.

At current rates, salaries will not exceed \$25,373 per annum. The successful candidate will be expected to engage in teaching and research.

Further particulars and applications may be obtained from the Director, Appointments & Personnel, University of Leeds, PO Box 136, Leeds LS2 9JT.

Closing date for receipt of applications is 14 February 1983.

British Telecom
Research Laboratories
Short-term Fellowships
in 1983

Applications are invited for short-term Fellowships at the British Telecom Research Laboratories, Martlesham, near Ipswich, during the academic year 1983/84. The Fellowships are open to members of the academic staffs of United Kingdom Universities and are normally tenable for six weeks.

The object of the Fellowships is to strengthen the links between the Universities and BTL. The Fellow will be expected to carry out a short project or review study relevant to public telecommunications services and encouragement will be given to continue the work on return to University, with BT funding in suitable cases.

Apart from relevance to telecommunications in its broadest sense, no restriction is placed on the field of study and proposals of a novel and an innovative nature are particularly welcomed.

It is expected that the Fellowships will be of interest mainly to Departments of Electrical Engineering, Physics, Chemistry, Mathematics and Computer Science. However it is hoped that the academic staffs of other Departments (eg Psychology, Linguistics, Physiology) will be encouraged to apply for Fellowships with a view to initiating relevant trans-disciplinary research.

Attendance at the BT Research Laboratories will be by mutual agreement. Travelling expenses and subsistence will be paid and an honorarium (£650) will be given at the completion of the Fellowship.

Applications, including a brief curriculum vitae and a short statement indicating the proposed area of interest and its relevance to the activities of BT, should be sent to: Mr D Beardall, TRP6(B), British Telecom Research Laboratories, Martlesham Heath, Ipswich IP5 7RR not later than 25 February 1983. Applications are invited from men and women.

British Telecom

West Glamorgan Institute of Higher Education

Visiting Fellowships Art & Design

WGHE is consolidating its position as a leading vocational art and design centre and in furthering this aim, applications are invited for two fixed term Visiting Fellowships from practising Artists:

Architectural Stained Glass

WGHE provides a unique course in this area of study which has an international reputation. The Visiting Fellow will work with students following a 3 year full-time DATEC Higher Diploma and assist with research at M.Phil level.

Illustration with Graphic Design

Illustration has been taught for many years at WGHE. The Visiting Fellow will work closely with students and will be expected to encourage links between college and industrial design projects.

Visiting Fellows will be paid on a pro-rata basis of a Lecturer II/Senior Lecturer's salary and will be subject to the same terms and conditions of staff, but for a specific period of time.

Application forms and further details are available from the Principal, West Glamorgan Institute of Higher Education, Townhill Road, SWANSEA SA2 0UT (s.a.s. please). Closing date for applications: 11th February 1983.

Further particulars and applications may be obtained from the Director, Appointments & Personnel, University of Hong Kong, PO Box 155, Hong Kong.

Closing date for receipt of applications is 14 February 1983.

STUDENTSIPS

awarded by the

GERMAN HISTORICAL INSTITUTE
LONDON

The German Historical Institute will award a number of studentships to enable British post-graduate students to pursue historical research for a doctoral degree in Germany. Applicants must have completed at least one year's post-graduate research and be studying German history or Anglo-German relations. A knowledge of the German language is also required. Other paid appointments or scholarships may not be held during the tenure of the studentship.

The studentship, amounting to DM1,300 per month, will begin on 1st July 1983 for a maximum period of one year. Candidates should send in their applications, together with a detailed outline of their project and their supervisor's recommendation to the Director, German Historical Institute, 17 Bloomsbury Square, London WC1A 2LP to arrive not later than 31st March 1983.

Robert Gordon's Institute of Technology
Aberdeen

School of Electronic and Electrical Engineering. The Institute is offering a number of studentships for research in the field of electronics and electrical engineering.

Good honours graduate with a degree in Electronics or Electrical Engineering. The successful candidate will be expected to engage in research and teaching.

Annual salary will be within the range of \$20,373 to \$25,373 per annum, plus 15% superannuation.

At current rates, salaries will not exceed \$25,373 per annum. The successful candidate will be expected to engage in teaching and research.

Further particulars and applications may be obtained from the Director, Appointments & Personnel, Robert Gordon's Institute of Technology, Aberdeen.

Closing date for receipt of applications is 14 February 1983.

University of Hong Kong
Lectureships in Management

Applications are invited for two posts of Lecturer in Management Studies in the Department of Accounting and Finance, Business Administration, or Marketing.

Applicants should possess a degree in Accounting, Finance, Business Administration, or Marketing, and have relevant experience in teaching and research.

Annual salary (senior) will be within the range of \$20,373 to \$25,373 per annum, plus 15% superannuation.

At current rates, salaries will not exceed \$25,373 per annum. The successful candidate will be expected to engage in teaching and research.

Further particulars and applications may be obtained from the Director, Appointments & Personnel, University of Hong Kong, PO Box 155, Hong Kong.

Closing date for receipt of applications is 14 February 1983.

The University of Leeds
Department of Computer Studies
Computing Assistant

Applications are invited for a post of Computing Assistant in the Department of Computer Studies.

Applicants should possess a degree in Computer Science or a related discipline, and have relevant experience in teaching and research.

Annual salary will be within the range of \$20,373 to \$25,373 per annum, plus 15% superannuation.

At current rates, salaries will not exceed \$25,373 per annum. The successful candidate will be expected to engage in teaching and research.

Further particulars and applications may be obtained from the Director, Appointments & Personnel, University of Leeds, PO Box 136, Leeds LS2 9JT.

Closing date for receipt of applications is 14 February 1983.

City of Birmingham Polytechnic
Faculty of Social Sciences and Arts
Department of Government and Social Studies
LECTURER II

Required to teach at degree and postgraduate level in the areas of Government and Social Studies. An ability to teach in the fields of Law or Economics would be desirable, though not essential.

Salary: Lecturer II - £6,855 - £11,022 p.a.

Further details and application forms to be returned by 14th February 1983 to: The Principal, City of Birmingham Polytechnic, 100, Colmore Row, Birmingham B3 2ST.

Sunderland Polytechnic
Faculty of Art and Design
Senior Lecturer in Glass

Applicants are invited to apply for a post of Senior Lecturer in Glass in the Faculty of Art and Design.

Applicants should possess a degree in Glass or a related discipline, and have relevant experience in teaching and research.

Annual salary will be within the range of \$20,373 to \$25,373 per annum, plus 15% superannuation.

At current rates, salaries will not exceed \$25,373 per annum. The successful candidate will be expected to engage in teaching and research.

Overseas continued

UNIVERSITY OF PORT HARCOURT, PORT HARCOURT, NIGERIA
ACADEMIC STAFF VACANCIES

Applications are invited from suitably qualified candidates to fill the following vacant posts in the University of Port Harcourt:

(1) **FACULTY OF HUMANITIES**
Professor/Reader (in History, Philosophy, Religious Studies, Foreign Languages and Comparative Literature)
Senior Lecturer (in Visual Arts, History, Linguistics and African Languages)
Lecturer III (in English, History)

(2) **FACULTY OF SOCIAL SCIENCES**
Professor/Reader (in Sociology, Geography)
Senior Lecturer (in Economics)
Lecturer III (in Sociology)

(3) **FACULTY OF BIOLOGICAL SCIENCES**
Professor/Reader (in Microbiology)

(4) **FACULTY OF CHEMICAL SCIENCES**
Professor/Reader (in Applied Chemistry, Biochemistry)
Senior Lecturer (in Applied Chemistry, Analytical Chemistry)
Lecturer III (in Physical Chemistry, Inorganic Chemistry)

(5) **FACULTY OF PHYSICAL SCIENCES**
Senior Lecturer (Computer Science)
Lecturer III (Statistics, Computer Science)

(6) **FACULTY OF EDUCATION**
Professor/Reader (in Psychology, Guidance and Counselling, Management and Planning, Institute of Education)
Senior Lecturer (in Psychology, Guidance and Counselling; Management and Planning; Institute of Education)
Lecturer III (in Psychology, Guidance and Counselling; Management and Planning; Institute of Education)

(7) **GRADUATE SCHOOL OF MANAGEMENT & BUSINESS STUDIES**
Professor/Reader (in Management, Marketing, Finance, Banking and Accounting)
Senior Lecturer (in Management, Marketing, Accounting)
Lecturer III (in Management, Marketing, Accounting)

(8) **FACULTY OF ENGINEERING**
Professor/Reader (in Electrical, Chemical Engineering)
Senior Lecturer (in Electrical Engineering)
Lecturer III (in Electrical Engineering)

(9) **COLLEGE OF HEALTH SCIENCES**
a) **FACULTY OF BASIC MEDICAL SCIENCES**
Professor/Reader (in Physiology, Pharmacology, Anatomy)
Senior Lecturer (in Physiology, Pharmacology)
Lecturer III (in Anatomy, Pharmacology)

b) **FACULTY OF CLINICAL SCIENCES**
Professor/Reader (in each of the following disciplines)
Senior Lecturer (in each of the following disciplines)
Lecturer III (in each of the following disciplines)
Obstetrics & Gynaecology, Paediatrics, Ear, Nose & Throat, Medicine, Public and Environmental Health.

(10) **INSTITUTE OF AGRICULTURAL RESEARCH AND**
Professor/Reader (in Agriculture, Crop Science, Agronomy, Botany, Zoology, Biology or other related disciplines)
Senior Lecturer (in Agriculture, Crop Science, Agronomy, Botany, Zoology, Biology or other related disciplines)
Lecturer III (in Agriculture, Crop Science, Agronomy, Botany, Zoology, Biology or other related disciplines)

QUALIFICATIONS & EXPERIENCE
University System Scale (USS) 12/14

a) Professor/Reader
Applicants must normally possess a doctorate degree and several years of University teaching and research experience in the relevant subject area. There must be clear evidence of contribution to scholarship expressed in the form of publications as well as evidence of ability to provide academic leadership.

b) Senior Lecturer
Applicants must normally possess a doctorate degree and several years of University teaching and research experience in the relevant subject area. There must be clear evidence of contribution to scholarship expressed in the form of publications as well as evidence of ability to provide academic leadership.

c) Lecturer III
Applicants must normally possess a doctorate degree and several years of University teaching and research experience in the relevant subject area. There must be clear evidence of contribution to scholarship expressed in the form of publications as well as evidence of ability to provide academic leadership.

and fish farming), rice cultivation and production, tuber crops and vegetables. Experience in handling two or more of these areas as well as in institutions actively engaged in productive research in these areas will be an advantage. Candidates must possess outstanding achievements in Research and show evidence of continuing contribution to knowledge as expressed in scholarly publications in learned journals.

University System Scale (USS) 13/14/15
c) Senior Lecturer
Applicants must normally possess a doctorate degree and several years of University teaching and research experience in the relevant subject area. There must be clear evidence of contribution to scholarship expressed in the form of publications as well as evidence of ability to provide academic leadership.

University System Scale (USS) 13
d) Senior Lecturer
Applicants must normally possess a doctorate degree and several years of University teaching and research experience in the relevant subject area. There must be clear evidence of contribution to scholarship expressed in the form of publications as well as evidence of ability to provide academic leadership.

University System Scale (USS) 11/9
e) Lecturer III
Applicants must normally possess a doctorate degree and several years of University teaching and research experience in the relevant subject area. There must be clear evidence of contribution to scholarship expressed in the form of publications as well as evidence of ability to provide academic leadership.

CONITIONS OF SERVICE
Conditions of service are as applicable in the Federal Public Service and as appropriate in the Nigerian Universities system.

UNIVERSITY SYSTEM SCALE
Professor/Reader: USS15-N14,280 x 720 - N15,720
Senior Lecturer: USS14-N12,732 x 660 - 16,372
Lecturer III: USS13-N11,364 x 576 - 14,820
Lecturer II: USS12-N10,000 x 480 - 13,000
Lecturer I: USS9-7,850 x 204 - 9,040

METHOD OF APPLICATION
Candidates should submit a curriculum vitae, stating research interests and publications, relevant qualifications and experience, present salary, the date they could be assumed, the names and addresses of three referees, and the post for which application is being made. Further information may be obtained from Miss J Lloyd, SA, Universities Office, Chichester House, 278 High Holborn, London WC1N 7HS, or from the Registrar (Admission), Appointment Office, University of Port Harcourt, Private Bag, Rondobosch, 7705, South Africa, by whom applications (quoting ref. No. E/2120) must be received not later than 11 March 1983.

The University's policy is not to discriminate on the grounds of sex, race or religion. Further information on the implementation of this policy is obtainable on request.

The Director, Nigerian Universities Office, 100 Tottenham Court Road, London W1P 0LE, to whom references should also be sent.



Australian Institute of Multicultural Affairs

The Institute is a Commonwealth statutory authority responsible for developing in the Australian community an awareness of its diverse cultures, a recognition of the contributions of those cultures to our society, and for promoting tolerance, understanding and cohesion throughout Australia.

The Institute's functions include the provision of advice to the Commonwealth Government on all matters relating to its responsibilities, commissioning and conducting research studies and publishing reports to the Minister.

Applications are invited from suitably qualified persons for appointment to this redefined position located in Melbourne.

Chief Research, Policy and Planning Division

Salary: \$A44,450 pa. a.

The incumbent of this position must have the qualities and standing to lead a team of experienced high quality research and policy planning staff in a multidisciplinary team in providing and evaluating research and policy planning services to the Institute. The incumbent must have a proven record in research and policy planning work and a proven record in providing and evaluating research and policy planning services to the Institute.

Terms and conditions of employment are broadly similar to those applying in the Australian Public Service. Applications from men and women from within or outside the Public Service are welcome. The terms of appointment will be negotiated.

Physically applicants who wish to be considered should apply to the Institute in writing.

Applications should be forwarded to: The Director, Australian Institute of Multicultural Affairs, GPO Box 2470, Melbourne, Victoria, 3001, Australia. Telephone Melbourne 03-4777 1234. Closing date: 28 February 1983.

UNIVERSITY OF CAPE TOWN

Chair in Commercial Law

Applications are invited for the above post, for appointment on or after 1 January 1984.

The University wishes to appoint a leading scholar who will take part in teaching and research in Commercial Law. The successful candidate will be expected to provide leadership in teaching and research in Commercial Law and to contribute to the development of the Department of Law.

Appointments will be made according to qualifications and experience on the salary scale R23 109-24 045 x 1 036-830 265 per annum. There is a salary supplement which is currently R1 800 per annum.

Director of the Institute of Marine Law

Applications are invited for the above post, for appointment on or after 1 January 1984.

The successful applicant will be the first Director of the Institute of Marine Law which is to be established to conduct research and disseminate information on the public international law of the sea, open for shipping law, the principal emphasis in the work of the Institute will be to provide a service of practical value.

The Director will have to launch the Institute. The University hopes to appoint a person with experience of governmental, and if possible, international law. A qualification in public international law will be necessary. Fluency in English and Afrikaans and an ability to read at least French and/or Spanish will be a recommendation.

Appointments will be made according to qualifications and experience on the professional salary scale R23 109-24 045 x 1 036-830 265 per annum. It is a salary supplement which is currently R1 800 per annum. It is intended to further appoint at least one senior research officer and a secretary to the Institute.

General

The University offers excellent fringe benefits including generous research leave, travel and moving expenses, an attractive housing subsidy and service bonus both subject to State regulations, 75% rebate on tuition fees for dependants at UCT, a good pension fund, medical aid and group life insurance.

Applicants should submit a curriculum vitae, stating research interests and publications, relevant qualifications and experience, present salary, the date they could be assumed, the names and addresses of three referees, and the post for which application is being made. Further information may be obtained from Miss J Lloyd, SA, Universities Office, Chichester House, 278 High Holborn, London WC1N 7HS, or from the Registrar (Admission), Appointment Office, University of Cape Town, Private Bag, Rondobosch, 7705, South Africa, by whom applications (quoting ref. No. E/2120) must be received not later than 11 March 1983.

The University's policy is not to discriminate on the grounds of sex, race or religion. Further information on the implementation of this policy is obtainable on request.

The Director, Nigerian Universities Office, 100 Tottenham Court Road, London W1P 0LE, to whom references should also be sent.

UNIVERSITY OF CAPE TOWN

J W Jagger Chair of Economics

Applications are invited for the above post (vacant) on 1 January 1984.

Applicants are sought from any major field of theoretical or applied economics. In all cases, applicants are expected to have strong analytical backgrounds and to have proven research records in their chosen fields of specialization.

Appointments will be made according to qualifications and experience on the salary scale R23 109-24 045 x 1 036-830 265 per annum. In addition a service bonus of nearly one month's salary is payable annually.

The University offers excellent fringe benefits, generous research leave, travel and moving expenses, an attractive housing subsidy, 75% rebate on tuition fees for dependants, a good pension fund, medical aid and group life insurance.

Applicants should submit a curriculum vitae, stating research interests and publications, relevant qualifications and experience, present salary, the names and addresses of three referees, and the post for which application is being made. Further information may be obtained from Miss J Lloyd, SA, Universities Office, Chichester House, 278 High Holborn, London WC1N 7HS, or from the Registrar (Admission), Appointment Office, University of Cape Town, Private Bag, Rondobosch, 7705, South Africa, by whom applications (quoting ref. No. E/2120) must be received not later than 11 March 1983.

The University's policy is not to discriminate on the grounds of sex, race or religion. Further information on the implementation of this policy is obtainable on request.

The Director, Nigerian Universities Office, 100 Tottenham Court Road, London W1P 0LE, to whom references should also be sent.

REMINDER
copy for Classified Ads in the THES should arrive not later than 10am Monday preceding publication

Overseas continued

UNIVERSITY OF MAIDUGURI, MAIDUGURI, NIGERIA

Applications are invited from suitably qualified persons for the following positions in the University of Maiduguri, Nigeria:

FACULTY OF EDUCATION
Department of Continuing Education and Extension Services
(a) Reader
(b) Senior Lecturer
(c) Lecturer I & II
(d) Graduate Assistants

DIRECTOR/PROFESSOR/READER
Candidates for the post of Director/Professor/Reader must be distinguished scholars with at least 10 years' experience in the relevant discipline and should have evidence of leadership in research and teaching at University level. Some administrative experience and evidence of continuous research activity and academic productivity would be required. Successful applicants will be expected to provide academic leadership and direction in a new Department. Level of appointment will depend on qualifications and experience.

SENIOR LECTURER
Sound academic qualifications preferably a Doctorate degree in the relevant discipline and at least five years' experience in teaching and research at University level. Candidates must demonstrate strong evidence of potential for continued research activity and academic leadership and must possess a minimum of five admissible publications.

LECTURER III
Candidates for this post must possess a Higher Degree, preferably a Doctorate with at least 2-3 years' teaching and research experience at University level. Level of appointment will depend on teaching and research experience.

GRADUATE ASSISTANTS
Candidates should possess a good Degree with first class Honours or Second Class Upper Division in the relevant subject area and should show evidence of interest in University teaching as a career. In exceptional circumstances, candidates who have a Second Class Lower Division Degree may be considered on receipt of higher academic transcripts from the last University.

SALARY SCALES
(i) Director USS 15 - N14,280 x 720 - N15,720
(ii) Professor USS 14 - N12,732 x 660 - 16,372
(iii) Senior Lecturer USS 13 - N11,364 x 576 - 14,820
(iv) Lecturer I USS 11 - N9,000 x 360 - N10,000
(v) Lecturer II USS 9 - N7,850 x 204 - 9,040
(vi) Graduate USS 7 - N6,138 x 180 - 6,800

Note: Placement within the salary grade levels will depend on qualifications and experience.

N = 8840

Other Conditions of Service
Appointments may be made:

(a) for a fixed term normally for two years contract (three years for Director/Professor) renewable by mutual agreement; Or
(b) on probation for three years initially in the case of Nigeria and thereafter appointment may be extended or confirmed to retiring age if services are considered satisfactory.

Fringe benefits include passages, from end to, for appointees and family, approved overseas leave, part-time accommodation or housing allowance in lieu and transport allowance, and contract allowance of 25% of basic salary for candidates appointed on contract or pension scheme where applicable as may be approved from time to time by the University.

There is also the Nigerian Expatriate Compensation Scheme ranging from N3,600 to N8,500 for Director, Reader and Senior Lecturers (from some selected disciplines) recruited from Britain, Western Europe, United States of America, Canada and any other area with confirmed higher remuneration.

Method of Application
Detailed applications (10 copies) should include applicant's Curriculum Vitae as follows:

1. Name and address
2. Post
3. Date and date of birth
4. Home address
5. Present postal address
6. Nationality
7. Marital status
8. Number and age of children
9. Secondary and Post-Secondary Education (including dates and institutions)
10. Academic and professional qualifications (including distinctions with dates)
11. Statement of experience including full details of former and present post
12. Current research
13. List of publications (including in what journals they were published)
14. Other activities outside current employment
15. Names and addresses of three referees
16. Proposed date of availability for duty appointed. Applications, which are required in ten copies, should be addressed to:

The Registrar, University of Maiduguri, P. M. B. 1088, Maiduguri, Borno State

to reach him not later than 24th February, 1983.

Applicants should request their names referred to the relevant authorities directly to the Registrar.

Candidates resident in the United Kingdom or Europe may send their applications to:

The Director, Nigerian Universities Office, 100 Tottenham Court Road, London W1P 0LE, to whom references should also be sent.

HUMANITIES, SOCIAL AND NATURAL SCIENCES

Lecturer

Applications are invited from suitably qualified persons for the post of Lecturer in the Department of Humanities, Social and Natural Sciences.

The successful candidate will be expected to provide leadership in teaching and research in the relevant discipline and to contribute to the development of the Department.

Appointments will be made according to qualifications and experience on the salary scale R23 109-24 045 x 1 036-830 265 per annum. There is a salary supplement which is currently R1 800 per annum.

The University offers excellent fringe benefits including generous research leave, travel and moving expenses, an attractive housing subsidy and service bonus both subject to State regulations, 75% rebate on tuition fees for dependants at UCT, a good pension fund, medical aid and group life insurance.

Applicants should submit a curriculum vitae, stating research interests and publications, relevant qualifications and experience, present salary, the names and addresses of three referees, and the post for which application is being made. Further information may be obtained from Miss J Lloyd, SA, Universities Office, Chichester House, 278 High Holborn, London WC1N 7HS, or from the Registrar (Admission), Appointment Office, University of Cape Town, Private Bag, Rondobosch, 7705, South Africa, by whom applications (quoting ref. No. E/2120) must be received not later than 11 March 1983.

The University's policy is not to discriminate on the grounds of sex, race or religion. Further information on the implementation of this policy is obtainable on request.

The Director, Nigerian Universities Office, 100 Tottenham Court Road, London W1P 0LE, to whom references should also be sent.

EUROPEAN UNIVERSITY INSTITUTE

Florence

places for Ph.D. studies in History, Economics, Law, Political and Social Sciences within its research programme. Applications specially welcome from students having or completing 1983 M.A.s, or M.Sc.s in relevant subjects.

Further information and application forms from Academic Service, European University Institute, Badia Fiesolana, Via Dei, Roccellini, 50016 S. Domenico, D.I. Fiesole, Italy.

University of Alberta

Edmonton, Canada

Department of History

ASSISTANT PROFESSOR

Applications are invited for a tenure track position in the Department of History. The successful candidate will be expected to provide leadership in teaching and research in the relevant discipline and to contribute to the development of the Department.

Appointments will be made according to qualifications and experience on the salary scale R23 109-24 045 x 1 036-830 265 per annum. There is a salary supplement which is currently R1 800 per annum.

The University offers excellent fringe benefits including generous research leave, travel and moving expenses, an attractive housing subsidy and service bonus both subject to State regulations, 75% rebate on tuition fees for dependants at UCT, a good pension fund, medical aid and group life insurance.

Applicants should submit a curriculum vitae, stating research interests and publications, relevant qualifications and experience, present salary, the names and addresses of three referees, and the post for which application is being made. Further information may be obtained from Miss J Lloyd, SA, Universities Office, Chichester House, 278 High Holborn, London WC1N 7HS, or from the Registrar (Admission), Appointment Office, University of Cape Town, Private Bag, Rondobosch, 7705, South Africa, by whom applications (quoting ref. No. E/2120) must be received not later than 11 March 1983.

The University's policy is not to discriminate on the grounds of sex, race or religion. Further information on the implementation of this policy is obtainable on request.

The Director, Nigerian Universities Office, 100 Tottenham Court Road, London W1P 0LE, to whom references should also be sent.

Administration

GLC

Working for London

Equal Opportunities within the GLC

The GLC has embarked upon a series of new initiatives aimed at positively establishing equal opportunities for all its employees. Implementation of this policy will give rise to extensive changes in employment and training practices and procedures and involve the introduction of a range of positive action measures.

To work in support of these initiatives, the Council wishes to recruit a number of people who possess an understanding of and are committed to achieving equal opportunities in employment for women, ethnic minorities and the disabled.

Equal Opportunities Officers

4 Posts £11,880-£13,353

Working on the research and development of positive action programmes, one officer is concerned with 16-19 year olds, a second with those over 19, both requiring a knowledge and experience of relevant educational and training opportunities, and possessing the capacity to initiate and implement projects.

Advancing career and employment opportunities will call for experience of a career counselling, an understanding of the specific employment and training needs of ethnic minorities and women and the ability to organise workshops and promotional activities.

One part-holder may be designated as Deputy to the Equal Opportunities Adviser on an enhanced salary rising to £15,021.

Equal Opportunities Trainers

3 Posts £11,880-£13,353

Providing direct training to the Council's staff in support of equal opportunities, officers will need to possess proven skills and experience of training in this or a closely related area and have a good understanding of up-to-date personnel practices and relevant legislation.

Information & Publicity Officer

£8,319-£11,538

Publishing and promoting equal opportunities policies and programmes to staff within the GLC, demanding excellent research and journalistic skills and in particular the ability to communicate in writing with all levels of staff.

In each case, an innovative and practical approach will be essential and should be combined with an ability to communicate and work effectively as a member of a team within a large organisation.

Salaries will be within the ranges indicated, inclusive of London Weighting Allowance.

For further details and an application form, which must be returned by 10th February 1983, write to the Personnel Department, PEFSD, Greater London Council, Room 316, The County Hall, London SE1 7PB, at telephone 01-633 5728.

Please state clearly in all correspondence for which position you are applying.

The GLC is an equal opportunities employer.

ile Inner London Education Authority

Chief Inspector

Salary £26,307-£29,088

Inclusive of £1,284 London Weighting Allowance

This post will become vacant on 1 September 1983 with the retirement of the present holder. The Chief Inspector is responsible for defining, maintaining and promoting proper professional standards in all educational institutions maintained by the Authority, for the professional management of the inspectorate and schools' psychological service and providing professional support to the Education Officer. The Chief Inspector leads a team of 135 inspectors and through the Principal Educational Psychologist is responsible for the work of 84 educational psychologists. The Chief Inspector and the three Deputy Education Officers form the senior management team directly responsible to the Education Officer.

The successful applicant will have had extensive and varied teaching experience in schools and/or in further and higher education, and will have held a senior position; the successful applicant will also ideally have worked in an advisory or inspectorial capacity, preferably as a leader of a team.

Application forms and further details obtainable from the Education Officer (EO/Estab 1b) Room 366, County Hall, London SE1 7PB. Completed applications to be returned to the above office by 4 February 1983.

ILEA is an equal opportunities employer.

Librarians

CAMBRIDGE UNIVERSITY LIBRARY

ASSISTANT UNDER-LIBRARIAN

(Department of Oriental and Other Languages)

Applications invited from good honours graduates in Arabic and Hebrew, or Arabic with some knowledge of Hebrew. Research and/or library qualifications or experience highly desirable.

Stipend on the Assistant Under-Librarian scale: £8,085 to £11,105.

Further particulars from the University Librarian, Secretary to the Appointment Committee for the University Library, University Library, West Road, Cambridge CB3 9DR, to whom applications should be sent by 18 February 1983.

University College Dublin

ASSISTANT LIBRARIAN (Grade 1)

(Road version)

Applications are invited from suitably qualified candidates for the post of Assistant Librarian (Grade 1) in the Veterinary Medicine Library at the University of Dublin.

Applicants should have a degree in a relevant subject and a minimum of two years' experience in a library or archive. The successful candidate will be expected to develop the on-line information retrieval service which is an integral part of the work of the library and to provide a reference service in this area.

Applicants for the post in the Veterinary Medicine Library should send their applications to the University Librarian, University Library, West Road, Cambridge CB3 9DR, to whom applications should be sent by 18 February 1983.

SPECIAL FEATURE FOR 1983

Management Education

Don's diary

Saturday

First stop, Copenhagen, and there quite remarkably ran into a colleague from the International Atomic Energy Agency in Vienna, Dr Mukherjee, together with number one son, en route to his Calcutta home for Christmas. A Welsh proverb, freely translated says, "sooner than two men meet than two mountains". How true, for last week Mukherjee was in our institute in North Wales on the occasion of an IAEA advisory group meeting on radiation sterilization. We next plan to meet in March 1983 in Burma to help set up a human tissue bank there. The unscheduled committee meeting was most useful.

Then an eight and a half hour flight over the frozen wastes of Greenland and Alaska. The story about Alaska breaking into two in order to make Texas the third largest state in the USA is now quite credible. I attended a UNESCO meeting on "New Technologies in Education" in South Carolina a few weeks ago. Learnt there of the television satellite distance learning system available to every school of 25 pupils or more in Alaska. Viewing directly this vast, remote, icy wilderness, now so intimately linked, makes mockery of the London belief that we are remote in north Wales, particularly in winter!

Sunday

I gained a day in my life some time ago, spending one Friday in Honolulu, and another in San Francisco. Now I am forced to return it as we cross the international date line. My wife rehearses her greeting to Japanese to our host, Professor Yoshio Nakamura, and in next to no time puts it to good use in a Ginza (Tokyo) restaurant, where we eat our seventh meal in 20 hours. Fortunately the tempura, fresh fish, fried before our eyes just slips down, and proved the ideal prelude to a long and satisfying sleep.

Monday

The two-hour train journey to Kiryu, a city of 130,000 inhabitants is the day's highlight. Never again will I tolerate jibes against the disorderliness of my home mining village of Rhosllanerchrugog. Compared with the outskirts of Tokyo, and now Kiryu, it is a model of town planning.

At a stroke my picture of domestic Japan as a super-modern, high-tech, progressive state is dashed. Life is hard, and these famous gadgets are expensive for the majority. With steak costing £25 or more a pound, and central heating, absolutely prohibitive; it is no wonder that their famed adaptiveness has yielded novel heating, bathing and feeding systems in their cramped multi-purpose housing, which is crammed into every inch of available ground. For reference, top professional salaries are £1,000 per month. This does not prevent our host personally filling our small comfortable apartment with every form of delicacy, bilingual television and, glory be, a western bed and toilet (specially installed).

Tuesday

Started with a shopping adventure. Heart-broken, we set for the familiar American-style supermarket, complete with sticky canned apple, and not a Japanese article to be heard. We soon learnt that appearances mean nothing. The "spiciest" and "healthiest" we selected turned out to be fatty. Only the gorgeous tangerines (mikan) and specially engineered giant apples (which our first home-made meal).

Made, after lunch, with dean, pro-

fessors and senior administrators of the faculty of technology, Gumma University, now my home here. Drink green tea at every port of call, seven in all.

Wednesday

Day with Professor Syu Ono, president of Gumma University at Gumma prefecture capital, Maebashi city. He heads three faculties, technology, medicine and education, and two training centres, one a technical college and the other for nurse education. All professional courses are preceded here by a general education year. He, therefore, understands the concept of our comprehensive higher and further education institution better than the standard UK academic. Our initial discussions auger well for our proposed future collaboration.

Thursday

First real opportunity of settling in with my research group. The programmes are all highly practical: modification of cellulose to make flame retardant plastics and paints; synthesis of polymers for permeable membranes, useful for water desalination and artificial kidneys; and constructing immobilization structures for enzymes, enabling them to be used repeatedly in industry. The group is typical of that which operates in Japanese government-funded universities (only 70 compared with more than 300 private universities). Headed by a professor, the group consists of an assistant professor, research assistants, four graduate students and six undergraduates. Facilities are not lavish, and remedied me of the conditions operating in British universities before the 1960s explosion.

Friday

Enjoyed a game of golf with Japanese professor, in perfect weather on Christmas Eve, after a Chinese meal. My partner paid for himself, in yen: tax 2,000, caddy (obligatory) 2,000, members recurrent fee 700, practice drives 200. Additionally for me paid: visitors fee 5,500 (10,000 at weekend) and 20,000 (in Tokyo), clubs 1,000, shoes 500. Altogether about £30 for a day's golf and lunch. In comparison, my annual fee at Pantynwyn is dirt cheap.

While marking the score-card, a pencil snapped. "Typical Japanese workmanship," said my host. Several times already I've encountered such depreciation of things Japanese, as we invariably blast things British. Certainly, the average Japanese does not appear to be aware of, or benefit individually from their notorious export juggernaut, any more than we get cheap petrol from North Sea oil.

Saturday

I shall add a second Saturday to compensate for the one we lost over here. Christmas Day is a different here as *Yukiaki* is to roast turkeys. Our thoughts are with our children and friends in Mold on route to Bethesda chapel. We settle, thankfully, for a Japanese-style Christmas dinner. Bing Crosby helps with *White Christmas* and *Jingle Bells*. Buddhists and Christians join in with *Adele* and *Christmas*. A beaming voice contributes over the telephone from Wales. What a small world it has become.

Glyn O. Phillips

The author is executive principal of The North East Wales Institute of Higher Education and is spending three months in Japan as visiting professor at Gumma University.

Shadows on the 1983 landscape



Timothy Healy

tant, among full-time degree freshmen.

Unlike federal aid, the demographic downturn is predictable and something with which the majority of the nation's colleges and universities should be able to cope. Students will continue to go to college, and even though numbers will decline (and in certain parts of the country very steeply) there will still be a need for quality education. For institutions with a mission and a style all their own, and for a variety of choices for the nation's young.

Thatcher's invasion of privacy

The lady's ideology. If Ford and GEC are in future to be made to pay for the training of their blue-collar workers, why not for that of their managerial staff also? In the recent case, the House of Lords gave the green light to private firms that wished to subsidize public school fees. Why should they get the university education of their potential managers wholly at the taxpayers' expense? I'm sure she will find the logic impeccable.

Christopher Price

I see that Britain's skillcentres are to be launched on the road to privatization this year. Under the current government, according to St Margaret, it's a case of providing skills which society needs, they will respond to those which our dwindling labour market is perceived to want. It will be tough on women and blacks and indeed the unemployed generally. But courses paid by employers for those in work will replace fully subsidized ones for those without it.

A second shadow on the graduate schools touches the professional areas, but selectively. Graduate schools are sensitive to the state of the market place, and the major market for the doctoral degree has been the nation's colleges and universities. All of these are cutting back on research and teaching budgets, and it will be several years before any are in a position to do much hiring again. There are few ways to ice young PhDs and hold them in a pipe line until their services are needed; thus, when the universities start hiring again we are going to be woefully shy of fully trained people.

A deepening of that shadow has just begun to be recognized and decried in America's intellectual discourse. More and more the nation's undergraduates are entering "safe" curricula such as engineering and business. Young people respond in fright to a bad economy, a soft market place, and the grim prospect of scrambling for what few jobs are available. Subjects like literature, physics, linguistics, history, and many others are seen as poor choices, both by the young and by their parents.

Engineering is to science what business is to mathematics, and in the long view of the university, practicality and relevance are generally narrowing and sterile. Fifteen years from now when the nation's colleges and universities will be looking for people with degrees in the humanities and the social sciences, there may be a great dearth of candidates with promising or even adequate preparation for graduate work in either.

National administrations reflect the drift of the nation itself, and that seems to be particularly true when rhetoric divorces itself from the reality it describes. The Reagan administration loudly trumpets its trust in private enterprise while it vigorously pushes budgets that will wreck our dual system of private and public colleges and universities. Finally, while on every stump in the nation we preach a return to our ancient (Republican) values, we are doing everything possible to turn the young away from teaching or research that has to do with values, aesthetics, and America's understanding of its own soul. Both presidential and congressional rhetoric claims to "call again" to academic America is left to say: But will they come when you do call for them?

Consider this proposition. Capital is not only a humanist work as well but far more humanist than the manuscripts for by 1867 Marx had developed a more sophisticated and coherent critique of capitalism with much clearer ideas as to how to reach the celebrated "realm of freedom" in which individuals can further develop their human potential through activities undertaken for their "own sake". Not everything is exactly bathed in sunlight, but in saying (in the distinguished company of the young Gramsci) that *Capital*, in contrast to the *Manifesto*, is an (inhuman?) economic determinism, you forget (as Engels complained towards the end of his life) Hegel and dialectics.

Marx considered himself a "new" materialist who had discovered, within a deterministic universe, a central place for politics, human activity, people as subjects. The determinism of *Capital* needs to be construed not in the spirit of Newtonian mechanics, but of Darwinian evolution, though I readily concede that a "dialectical determinism" is a difficult and complex concept which Marx scholars in this country are only just beginning to get to grips with.

Wall, who ever thought otherwise? Of course the *Paris Manuscripts* were never formally published by Marx. As Flather's own article shows, they were not published until the 1930s and since Marx died in 1883, he could hardly be thought to have checked the galley proofs for himself. And anyone who has actually read these early notes must be perfectly well aware that they are fragmentary and incomplete.

But this hardly constitutes an earth-shaking discovery that will "set up a dam that can really hold up the flood" of humanist Marxism, as a West German delegate is reported to have said. Humanist Marxism rests with the validity of its ideas, not upon the formal imprimatur of Marx himself. Even if Rojahn's researches prove that the *Paris Manuscripts* were scribbled on the backs of old envelopes, this will not detract from the fact that Marx's 1844 conception of alienation is both interesting in its own right, and that these early jottings cast some light upon sections of

LETTERS TO THE EDITOR

Marx 'discovery' not such a bombshell after all

Sir, - Congratulations to *The Times* for being so quick off the Marx so early on in this the 100th anniversary of the "Moors" death. The claim that the humanist Marx has been blown sky high by recent research makes for an excellent story but bold on a minute... during the infinite number of times I have suffered mental bruises and blisters clambering over the craggy surfaces of the *Paris Manuscripts* of 1844, I had always assumed that the manuscripts were, as you say, "a collection of notes and rough ideas" - brilliant, infuriating and very much a first draft. And whatever we make of them, certainly not the last gasp of the humanist Marx.

Consider this proposition. *Capital* is not only a humanist work as well but far more humanist than the manuscripts for by 1867 Marx had developed a more sophisticated and coherent critique of capitalism with much clearer ideas as to how to reach the celebrated "realm of freedom" in which individuals can further develop their human potential through activities undertaken for their "own sake". Not everything is exactly bathed in sunlight, but in saying (in the distinguished company of the young Gramsci) that *Capital*, in contrast to the *Manifesto*, is an (inhuman?) economic determinism, you forget (as Engels complained towards the end of his life) Hegel and dialectics.

The case for an education staff college

Sir, - I refer to the perceptive and penetrating editorial "Policy analysis" (*THES*, January 7). As you say the need for sustained and sophisticated analysis of higher education policy has never been greater. I believe however that the unit for higher education policy which you advocate would be better understood and more marketable in a public relations and "political" sense, if you did not avoid the description of staff college, despite its connotations of elitism, for it is a staff college which you identify as the need.

Just as the success of the German general staff, with all its connotations, pointed the way to the establishment of our service staff colleges, which in turn were copied by multinational and national corporations, so it is surely time to establish an education staff college? Not restricted solely to higher education but open to "high fliers" or "fast runners" from all sectors of education, as a training ground for aspirant career administrators and academic managers - there is a difference - and as a reorientation for senior management as well as a forum for national debate and policy discussion.

A new course or purpose-built, lavishly-staffed building in a green field campus is not required. The real estate already exists in plenty: Coombe Lodge, an admirable though misnamed further education staff college - for it is not a staff college in the accepted sense; or, nearer the mark, the administrative staff college at Henley; even the Department of Education and Science designated regional management centres, though with one or two notable exceptions they have singularly failed to address themselves to educational policy and management problems.

The strands therefore exist. The concept certainly exists. All that is needed is formalization and coordination and of course the will. As your editorial points out there are no votes in higher education. The "British Brookings" has been emasculated into the Technical Change Centre, the Society for Research in Higher Education is a talking shop, there is a mafia of more or less credible, often self-confessed experts in higher education administration who write and perform at the plethora of fragmentary symposia seminars and conferences, where by and large the same delegates confirm each other's prejudices on the national and international circuit and written proceedings are consigned to the limbo of papered files.

Of course good work is done. The Conference of University Administrators, the Conference of Polytechnic Secretaries, the Polytechnic Finance Officers' Group and the Association of College Registrars and Administrators are among groups which try to inform and train their members but all too often it is merely "the friction of fine minds".

Elsewhere in *THE THES*, January 7, you report on a letter from Mr Peter Waters of the London School of Hygiene and Tropical Medicine, under the heading "Take administration seriously". Mr Waters notes, *inter alia*, the appointment to university administrations of former service officers - a reference to a major general - at the expense of candidates with decades of experience in university administration. Leaving aside the question as to whether this is often one year's experience repeated for a decade, dare I suggest that one reason for the appointment of ex-service officers is precisely because they are Staff College trained? I can follow that which was for "social" the polytechnic sector, among senior administrators, there is a brigadier, a colonel, at least a brace of wing commanders, a colonel and a lieutenant colonel. While during I will further suggest that it is perhaps the formal structured service staff college which produces the flexibility of approach and management expertise which, for instance, and leaving aside the military or diplomatic merits or demerits, produced the outstanding logistics success of the recent Falklands campaign.

The answer, Sir, to the problem outlined in your editorial and the establishment of a staff college for selected potential or actual high fliers, administrators and managers at all levels of all sectors of education, however elitist this may sound, with if necessary, a modular and distance learning system of study on an international, national and regional basis, leading to a qualification.

In conclusion I must declare an interest. I am a staff college trained -

Yours sincerely,
JOHN HOFFMAN,
Department of Politics,
University of Leicester.

Sir, - I am amazed to discover from your front-page article: "Challenge to Marx scholars" (*THES*, January 14), and from your leader in the same issue, that my lectures to second-year students over the past several years have anticipated a startlingly original contribution to Marxist scholarship; a discovery which has, according to your correspondent, "been described by Eric Hobsbawm as 'nothing short of a depth-charge in the world of Marxist scholarship'". Until the text of Jürgen Rojahn's findings becomes more generally available, one cannot, of course, properly judge their originality; but Paul Fletcher's report from the Linz

conference hardly justifies the excited tone of *The THES* response. According to Fletcher, Rojahn has confirmed that Marx's 1844 *Paris Manuscripts* "are nothing more than a collection of working notes and rough ideas", and has concluded that "they were never formally published by Marx, and should probably have no formal status at all."

Wall, who ever thought otherwise? Of course the *Paris Manuscripts* were never formally published by Marx. As Flather's own article shows, they were not published until the 1930s and since Marx died in 1883, he could hardly be thought to have checked the galley proofs for himself. And anyone who has actually read these early notes must be perfectly well aware that they are fragmentary and incomplete.

But this hardly constitutes an earth-shaking discovery that will "set up a dam that can really hold up the flood" of humanist Marxism, as a West German delegate is reported to have said. Humanist Marxism rests with the validity of its ideas, not upon the formal imprimatur of Marx himself. Even if Rojahn's researches prove that the *Paris Manuscripts* were scribbled on the backs of old envelopes, this will not detract from the fact that Marx's 1844 conception of alienation is both interesting in its own right, and that these early jottings cast some light upon sections of

More than half of this support comes from foundations, one with their help we are certainly tackling subjects which are politically unpopular. It seemed to us sensible to keep out of the mainstream of higher education policy research while the major series of Leverhulme studies is in progress; though it is not irrelevant that we have recently published work on the sensitive subject of student loans. If you, Sir, would like to comment to us politically unpopular subjects in higher education which ought to have our attention, we shall be glad to hear from you.

Yours sincerely,
SIR CHARLES CARTER,
Chairman, Research Committee,
Policy Studies Institute.

Sir, - The usual thoughtfulness of your leaders seems to have lapsed temporarily in the leader "Policy self-analysis". Can anyone seriously believe that a high priority should be given to a unit for the study of higher education policy in the year following that which was for "social" the polytechnic sector, among senior administrators, there is a brigadier, a colonel, at least a brace of wing commanders, a colonel and a lieutenant colonel. While during I will further suggest that it is perhaps the formal structured service staff college which produces the flexibility of approach and management expertise which, for instance, and leaving aside the military or diplomatic merits or demerits, produced the outstanding logistics success of the recent Falklands campaign.

The answer, Sir, to the problem outlined in your editorial and the establishment of a staff college for selected potential or actual high fliers, administrators and managers at all levels of all sectors of education, however elitist this may sound, with if necessary, a modular and distance learning system of study on an international, national and regional basis, leading to a qualification.

In conclusion I must declare an interest. I am a staff college trained -

Yours sincerely,
JOHN HOFFMAN,
Department of Politics,
University of Leicester.

Marx considered himself a "new" materialist who had discovered, within a deterministic universe, a central place for politics, human activity, people as subjects. The determinism of *Capital* needs to be construed not in the spirit of Newtonian mechanics, but of Darwinian evolution, though I readily concede that a "dialectical determinism" is a difficult and complex concept which Marx scholars in this country are only just beginning to get to grips with.

Consider this proposition. *Capital* is not only a humanist work as well but far more humanist than the manuscripts for by 1867 Marx had developed a more sophisticated and coherent critique of capitalism with much clearer ideas as to how to reach the celebrated "realm of freedom" in which individuals can further develop their human potential through activities undertaken for their "own sake". Not everything is exactly bathed in sunlight, but in saying (in the distinguished company of the young Gramsci) that *Capital*, in contrast to the *Manifesto*, is an (inhuman?) economic determinism, you forget (as Engels complained towards the end of his life) Hegel and dialectics.

Marx considered himself a "new" materialist who had discovered, within a deterministic universe, a central place for politics, human activity, people as subjects. The determinism of *Capital* needs to be construed not in the spirit of Newtonian mechanics, but of Darwinian evolution, though I readily concede that a "dialectical determinism" is a difficult and complex concept which Marx scholars in this country are only just beginning to get to grips with.

Wall, who ever thought otherwise? Of course the *Paris Manuscripts* were never formally published by Marx. As Flather's own article shows, they were not published until the 1930s and since Marx died in 1883, he could hardly be thought to have checked the galley proofs for himself. And anyone who has actually read these early notes must be perfectly well aware that they are fragmentary and incomplete.

But this hardly constitutes an earth-shaking discovery that will "set up a dam that can really hold up the flood" of humanist Marxism, as a West German delegate is reported to have said. Humanist Marxism rests with the validity of its ideas, not upon the formal imprimatur of Marx himself. Even if Rojahn's researches prove that the *Paris Manuscripts* were scribbled on the backs of old envelopes, this will not detract from the fact that Marx's 1844 conception of alienation is both interesting in its own right, and that these early jottings cast some light upon sections of

More than half of this support comes from foundations, one with their help we are certainly tackling subjects which are politically unpopular. It seemed to us sensible to keep out of the mainstream of higher education policy research while the major series of Leverhulme studies is in progress; though it is not irrelevant that we have recently published work on the sensitive subject of student loans. If you, Sir, would like to comment to us politically unpopular subjects in higher education which ought to have our attention, we shall be glad to hear from you.

Yours sincerely,
SIR CHARLES CARTER,
Chairman, Research Committee,
Policy Studies Institute.

Sir, - The usual thoughtfulness of your leaders seems to have lapsed temporarily in the leader "Policy self-analysis". Can anyone seriously believe that a high priority should be given to a unit for the study of higher education policy in the year following that which was for "social" the polytechnic sector, among senior administrators, there is a brigadier, a colonel, at least a brace of wing commanders, a colonel and a lieutenant colonel. While during I will further suggest that it is perhaps the formal structured service staff college which produces the flexibility of approach and management expertise which, for instance, and leaving aside the military or diplomatic merits or demerits, produced the outstanding logistics success of the recent Falklands campaign.

The answer, Sir, to the problem outlined in your editorial and the establishment of a staff college for selected potential or actual high fliers, administrators and managers at all levels of all sectors of education, however elitist this may sound, with if necessary, a modular and distance learning system of study on an international, national and regional basis, leading to a qualification.

In conclusion I must declare an interest. I am a staff college trained -

Yours sincerely,
JOHN HOFFMAN,
Department of Politics,
University of Leicester.

Marx considered himself a "new" materialist who had discovered, within a deterministic universe, a central place for politics, human activity, people as subjects. The determinism of *Capital* needs to be construed not in the spirit of Newtonian mechanics, but of Darwinian evolution, though I readily concede that a "dialectical determinism" is a difficult and complex concept which Marx scholars in this country are only just beginning to get to grips with.

Consider this proposition. *Capital* is not only a humanist work as well but far more humanist than the manuscripts for by 1867 Marx had developed a more sophisticated and coherent critique of capitalism with much clearer ideas as to how to reach the celebrated "realm of freedom" in which individuals can further develop their human potential through activities undertaken for their "own sake". Not everything is exactly bathed in sunlight, but in saying (in the distinguished company of the young Gramsci) that *Capital*, in contrast to the *Manifesto*, is an (inhuman?) economic determinism, you forget (as Engels complained towards the end of his life) Hegel and dialectics.

Marx considered himself a "new" materialist who had discovered, within a deterministic universe, a central place for politics, human activity, people as subjects. The determinism of *Capital* needs to be construed not in the spirit of Newtonian mechanics, but of Darwinian evolution, though I readily concede that a "dialectical determinism" is a difficult and complex concept which Marx scholars in this country are only just beginning to get to grips with.

Wall, who ever thought otherwise? Of course the *Paris Manuscripts* were never formally published by Marx. As Flather's own article shows, they were not published until the 1930s and since Marx died in 1883, he could hardly be thought to have checked the galley proofs for himself. And anyone who has actually read these early notes must be perfectly well aware that they are fragmentary and incomplete.

But this hardly constitutes an earth-shaking discovery that will "set up a dam that can really hold up the flood" of humanist Marxism, as a West German delegate is reported to have said. Humanist Marxism rests with the validity of its ideas, not upon the formal imprimatur of Marx himself. Even if Rojahn's researches prove that the *Paris Manuscripts* were scribbled on the backs of old envelopes, this will not detract from the fact that Marx's 1844 conception of alienation is both interesting in its own right, and that these early jottings cast some light upon sections of

More than half of this support comes from foundations, one with their help we are certainly tackling subjects which are politically unpopular. It seemed to us sensible to keep out of the mainstream of higher education policy research while the major series of Leverhulme studies is in progress; though it is not irrelevant that we have recently published work on the sensitive subject of student loans. If you, Sir, would like to comment to us politically unpopular subjects in higher education which ought to have our attention, we shall be glad to hear from you.

Yours sincerely,
SIR CHARLES CARTER,
Chairman, Research Committee,
Policy Studies Institute.

Sir, - The usual thoughtfulness of your leaders seems to have lapsed temporarily in the leader "Policy self-analysis". Can anyone seriously believe that a high priority should be given to a unit for the study of higher education policy in the year following that which was for "social" the polytechnic sector, among senior administrators, there is a brigadier, a colonel, at least a brace of wing commanders, a colonel and a lieutenant colonel. While during I will further suggest that it is perhaps the formal structured service staff college which produces the flexibility of approach and management expertise which, for instance, and leaving aside the military or diplomatic merits or demerits, produced the outstanding logistics success of the recent Falklands campaign.

The answer, Sir, to the problem outlined in your editorial and the establishment of a staff college for selected potential or actual high fliers, administrators and managers at all levels of all sectors of education, however elitist this may sound, with if necessary, a modular and distance learning system of study on an international, national and regional basis, leading to a qualification.

In conclusion I must declare an interest. I am a staff college trained -

Yours sincerely,
JOHN HOFFMAN,
Department of Politics,
University of Leicester.

Union View

Half-term report on the UGC

The University Grants Committee has now sent to the Secretary of State for Education a report on how the cuts programme is progressing half way through the three year savaging of university finance by the Government.

The whole tenor of this report is, to put it mildly, deeply disappointing. To put it more strongly, it is a pitiful document.

Apart from the figures of posts being lost being hopelessly out of date, the report seems to say "We've all been very good boys and girls in complying with the financial framework you have laid down. There have been difficulties but we are adjusting well. Some universities haven't fallen into line as we would wish but on the UGC we are doing our best with those recalcitrants."

AUT

Yet apart from some paper exercises and a few visits there has been no real attempt to analyse the devastating effect the cuts have had in some institutions. There has been no reference to the fact that our young people, while having their educational opportunities denied to them in universities because of the limitation on student numbers, have been allowed to cram into polytechnics where in some subjects the staff student ratio has reached a proportion where academic standards have taken a heavy tumble.

At the same time hundreds of experienced university teachers have been forced out of employment and skill and experience has been lost to the system.

We hear a great deal about the "new blood" scheme. Quite rightly many of our members are asking about the treatment of the "old blood".

It is of course, important to give young people a chance, to develop into the teachers and researchers of the future. However, do not people who have served the universities long and well also deserve consideration?

'We are not trees but human beings'

In any case, any young man or woman worth their salt will look into the future and say: "Fine, I'm getting my chance now and at least I'll be in work. But when I reach maturity am I going to be treated in the same way as the present generation of older colleagues and also be forced out of the system?"

It is deplorable that the UGC should have set up and allowed university academics to be treated like trees where you prune off the older twigs and allow the newer ones to grow. We are not trees but human beings who have a rich contribution to make to the universities in particular and society in general.

And that is the root of the trouble. This whole cuts exercise has been imposed by a government which is devoid of human consideration and executed by a body which has carried through this lack of humanity.

The credo of the UGC has been unrelenting. This discipline, contract or close that department and just pay off the individuals concerned.

It has been a sad period for the university system that a body with a majority of academics upon it has been considered as matters like ill thought-out academic considerations to predominate over humanity and concern for one's fellow beings - which is supposed to be one of the things for which universities stand.

Laurie Sapper

The author is general secretary of the Association of University Teachers.

Bearding Crick

Sir, - "Is there, has there ever been, a British 'Intelligentsia'?" (*THES*, January 14). If there is, or has been, the main criterion would seem to be the degree of hirsuteness. For Bernard Crick, "political intellectuals" are either "clean-shaven or with small chin-beards". Into which category, then, falls Rebecca West, the only woman of this group to be mentioned by name (indeed, the only named woman, in the whole article)? Invited to dress his own intellectual, the reader must clearly disregard the female sex altogether unless they are all hiding behind their beards.

Yours faithfully,
KATIE WALES,
Royal Holloway College.

Happy birthday

Sir, - Allow me to congratulate Sir Keith Joseph, Secretary of State for Education, on attaining the age of 65 (January 17) and wish him a long and happy retirement.

Yours truly,
PROFESSOR K. J. CONNOLLY,
Department of Psychology,
University of Sheffield.

Letters for publication should arrive by Tuesday morning. They should be as short as possible and written on one side of the paper. The editor reserves the right to cut or amend.